2

FIGURES

Of the moſt Beautiful, Useful, and Uncommon

PLANTS

DESCRIBED IN THE

GARDENERS DICTIONARY,

172

EXHIBITED ON

Three Hundred Copper Plates,

Accurately Engraven after DRAWINGS taken from NATURE.

WITH

The Characters of their Flowers and Seed-Vessels,
Drawn when they were in their greateſt Perfection.

To which are added,

Their Descriptions, and an Account of the Classes to which they belong,
according to *Ray*'s, *Tournefort*'s, and *Linnæus*'s Method of Claſſing them.

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In TWO VOLUMES.

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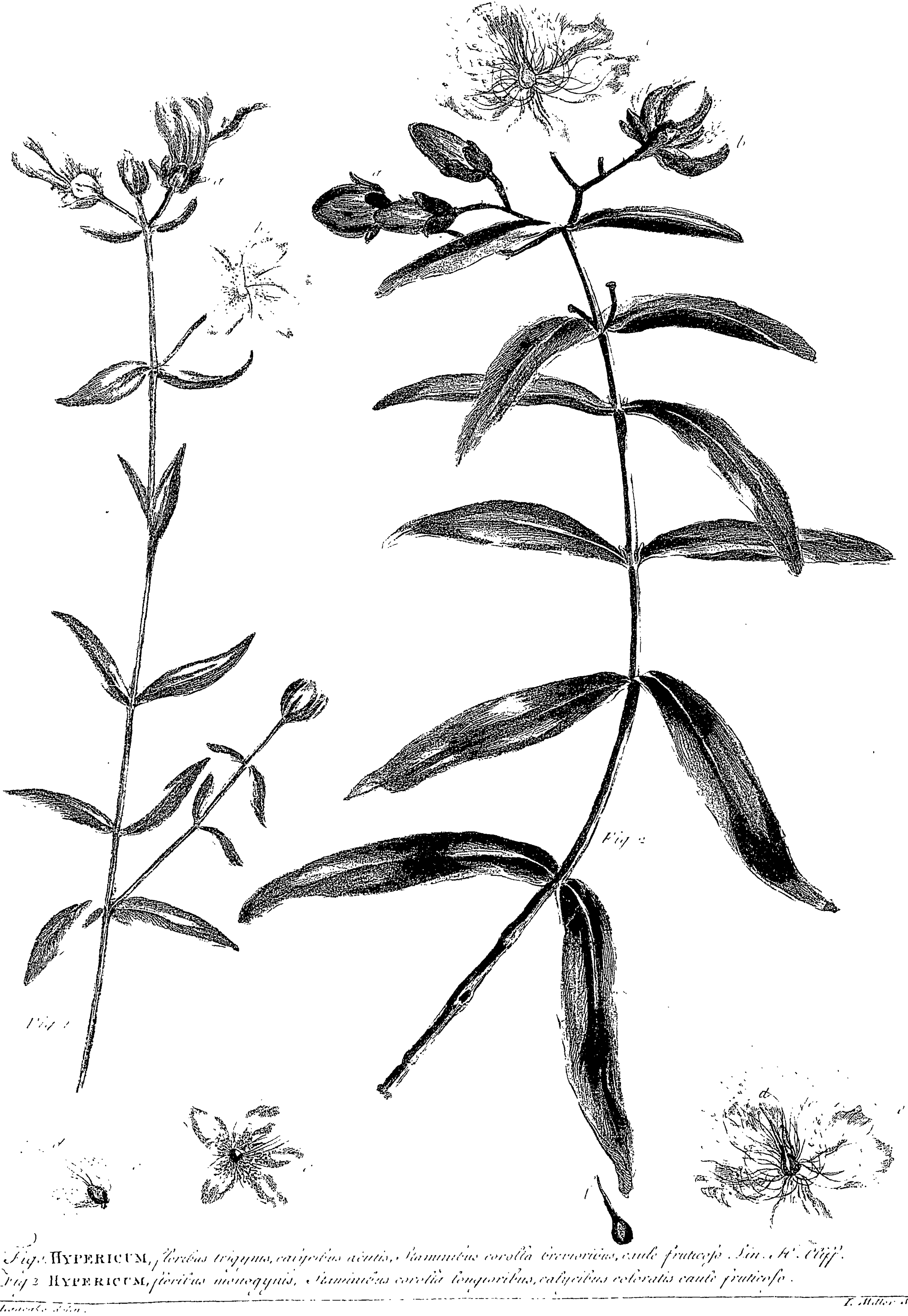


Fig. 1 HYPERICUM, *floribus trigynis, calycibus acutis, staminibus corollâ brevioribus, caule fruticoso. Lin. Hort. Cliff.*
Fig. 2 HYPERICUM, *floribus monogynis, staminibus corollâ longioribus, calycibus coloratis caule fruticoso.*

R. Lancake delin. *I. Miller Sculp.*

Publish'd according to Act of Parliament by P. Miller, April 28, 1757.

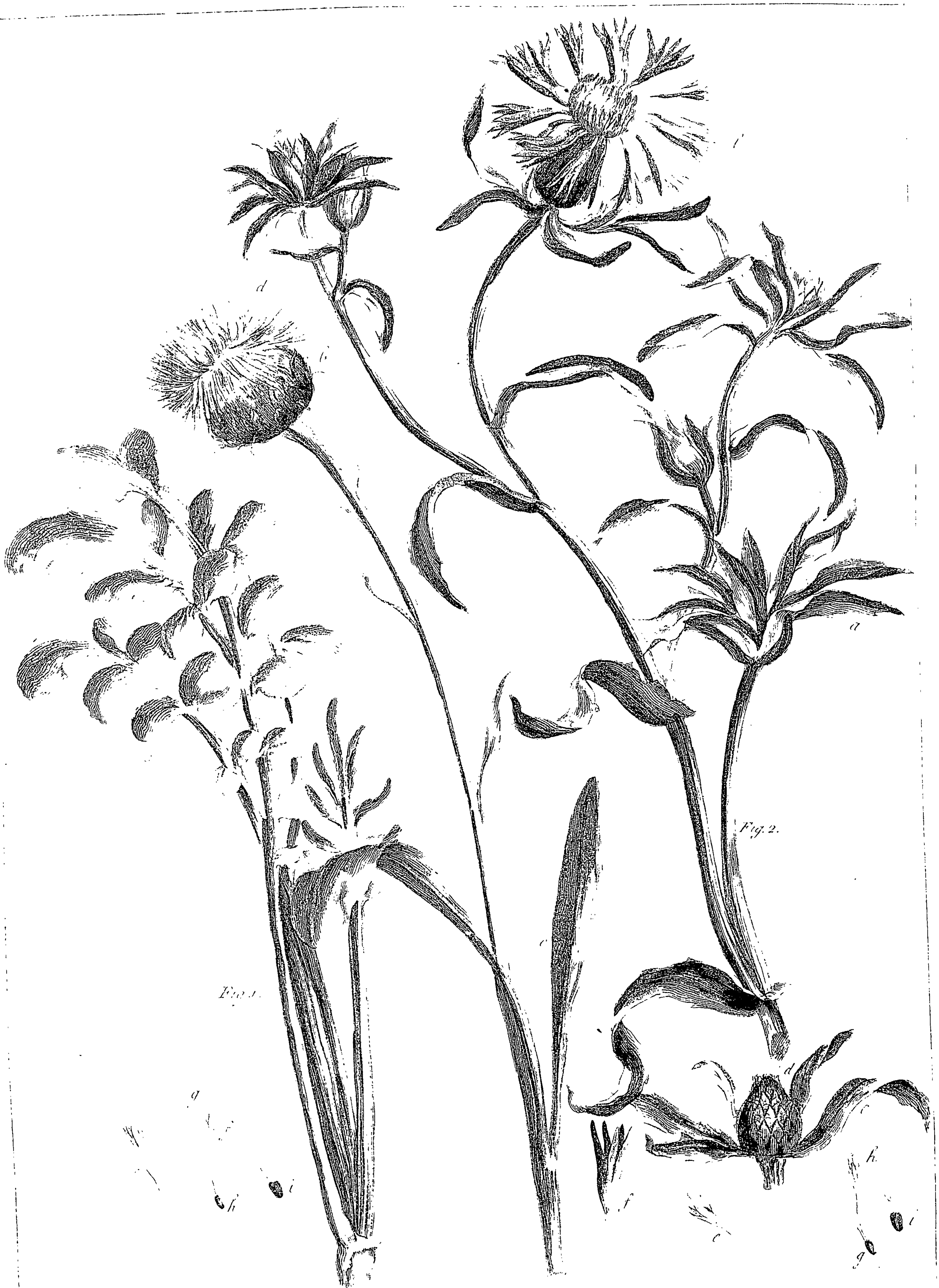


Fig. 1. IACEA, arborea argentea Ragusina Zan. Hist. 107.

Fig. 2. IACEA, calycibus squarrosis recurvatis, verticillato-foliosis, foliis radicalibus ovato-oblongis, caulinis dentatis.

R. Lancake delin. J. Miller Sculp.

Publish'd according to Act of Parliament by P. Miller April 28. 1757.

PLATE CLI.

Hypericum, *Tourn. Inſt. R. H.* 254. *Tab.* 131. *Lin. Gen. Plant.* 808. St. John's-wort; *in* French, *Millepertuis.*

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Sixth Claſs, which includes the Herbs with a Roſe-Flower, whoſe Pointal becomes a Fruit with many Capſules. *Linnæus* ranges it in the Third Section of his Eighteenth Claſs, intituled, *Polyadelphia Polyandria*, from the Flowers having many Stamina and Styles; and to this Genus he has joined the *Androſæmum* and *Aſcyrum* of *Tournefort.*

The Species here repreſented are,

Fig. 1. Hypericum *floribus trigynis, calycibus acutis, ſtaminibus corolla brevioribus, caule fruticoſo, Lin. Hort. Cliff.* 380. St. John's-wort with Three Styles in each Flower, acute Empalements, the Stamina ſhorter than the Petals, and a ſhrubby Stalk. This is the *Hypericum orientale flore magno, Tourn. Cor.* 19. Eaſtern St. John's-wort with a large Flower; and the *Hypericum montis Olympi, Wheel. Itin.* 222. St. John's-wort of Mount *Olympus.*

This Plant grows naturally on Mount *Olympus*, where it was diſcovered by Sir *George Wheeler*, in his Journey through the Eaſt; who ſent the Seeds to the Botanic Garden at *Oxford*, where the Plants were raiſed. It was afterwards found by *Tournefort*, who ſent the Seeds to the Royal Garden at *Paris*, where they ſucceeded; and from thence moſt of the Gardens in *Europe* have been furniſhed with this Plant.

It hath a thick tufted fibrous Root, from which ariſe many upright Stalks, about One Foot high, which are ligneous, and covered with a brown Bark: Theſe put out Two or Three ſhort Branches toward the Top, but rarely have any below. They are garniſhed with ſmall ſtiff Spear-ſhaped Leaves placed oppoſite, ſitting cloſe to the Stalk: They are Three-fourths of an Inch long, and One-fourth broad in the Middle, of a bright green Colour. The Flowers are produced at the Top of the Stalks: Theſe are compoſed of Five large yellow Petals, which are concave, and obtuſe, included in a five-leaved Empalement, which is pointed, as is repreſented at *a*. The Petals of the Flower are ſhewn at *b*, and within theſe are ſituated many Stamina, repreſented at *c*, which are ſhorter than the Petals. From the Middle of theſe ariſe Three Styles, which are repreſented at *d*; theſe ſit upon the Germen, which afterwards becomes a dry Capſule, having Three Cells filled with ſmall Seeds.

This Plant begins to flower about the Middle of *June*, and continues flowering till the Middle or latter End of *Auguſt*, and in warm Seaſons produces ripe Seeds in *England.* As this Plant will live in the open Air in this Country, and requires but little Culture, ſo it may be allowed a Place in every good Garden.

Fig. 2. Hypericum *floribus monogynis ſtaminibus corolla longioribus, calycibus coloratis caule fruticoſo.* St. John's-wort with a Flower having One Style, the Stamina longer than the Corolla, the Empalement coloured, and a ſhrubby Stalk.

This Plant grows naturally in *China*, from whence the Seeds were brought to his Grace the Duke of *Northumberland*, which were ſown in his Grace's curious Garden at *Stanwick*, where they ſucceeded; and, by his Grace's Generoſity, the *Chelſea* Garden was furniſhed with this and many other curious Plants.

The Root of this Plant is compoſed of many ligneous Fibres, which ſtrike deep in the Ground; from which ariſe ſeveral ſhrubby Stalks, near Two Feet high, covered with a purpliſh Bark, and garniſhed with ſtiff ſmooth Leaves, about Two Inches long and a Quarter of an Inch broad, placed by Pairs oppoſite, ſitting cloſe to the Stalk: They are of a lucid green on their upper Side, and grey on their under, having many tranſverſe Veins running from the Midrib to the Border. The Flowers are produced at the Top of the Stalks, growing in ſmall Cluſters, each ſtanding upon a ſhort diſtinct Footſtalk: Theſe have an Empalement of One Leaf, divided into Five obtuſe Segments; repreſented at *a*, which is of a deep purple Colour. The Flower is compoſed of Five large obtuſe Petals of a bright yellow Colour, repreſented at *b* and *c*; theſe are concave; and in the Center is ſituated an oval Germen ſupporting a ſingle Style, repreſented at *d*, which is attended by a great Number of Stamina, ſhewn at *e*, which are longer than the Petals, and terminated by roundiſh Summits.

This Plant continues in Flower great Part of the Year, which renders it the more valuable; and if it is planted in a very warm Situation, it will live in the open Air; but thoſe Plants which ſtand abroad will not flower in Winter, as thoſe do which are removed into Shelter in the Autumn.

PLATE CLII.

Jacea, *Tourn. Inſt. R. H.* 443. *Tab.* 254. *Centaurea, Lin. Gen. Plant.* 880. Knapweed; *in* French, *Jacée.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Twelfth Claſs, which includes the Herbs with a floſculous Flower, whoſe Seeds have Down. Doctor *Linnæus* ranges it in the Third Section of his Nineteenth Claſs, intituled, *Syngeneſia Polygamia Fruſtranea.* The Plants of this Section have Flowers whoſe Diſk or Middle is compoſed of hermaphrodite Flowers, which are fruitful, and the Border, or Rays, of female Florets, which are abortive. To this Genus he has joined the *Centaurium majus*, and the *Cyanus* of *Tournefort.*

The Species here repreſented are,

Fig. 1. Jacea *arborea, argentea Raguſina, Zan. Hiſt.* 107. Silvery Tree Knapweed of *Raguſa.* This is the *Jacea Epidaurica, candidiſſima & tomentoſa, Tourn. Inſt. R. H.* 445. Knapweed of *Mauritania* with hoary woolly Leaves. Doctor *Linnæus* titles it *Centaurea calycibus ciliatis, foliis tomentoſis pinnatifidis, foliolis obtuſis ovatis integerrimis, exterioribus majoribus, Hort. Cliff.* 422.

Centaury with hairy Empalements, woolly Leaves with winged Points, and the Lobes oval, obtuſe, and larger on the outer Part of the Leaf.

This Plant grows naturally on the Borders of the *Mediterranean Sea*, both on the *African* and *European* Shores; but hath been long cultivated in the curious Gardens in every Part of *Europe*, for the remarkable Whiteneſs of its Leaves. This ſeldom riſes more than Three Feet high in *England*, with a ſhrubby perennial Stalk, which divides upward into ſeveral Branches: Theſe have each One Head or Cluſter of Leaves, having long Footſtalks ariſing from One Center, which are divided into ſeveral obtuſe Parts quite to the Midrib, ſo as to have the Reſemblance of a winged Leaf, as is repreſented at *a*, and are very hoary, and ſoft to the Touch. From theſe Heads or Cluſters of Leaves ariſe the Footſtalks of the Flowers, which are garniſhed with a few white Spear-ſhaped Leaves, which are intire, as is repreſented at *c*, and is terminated by One Head of Flowers, incloſed in a hairy ſcaly Empalement, as ſhewn at *b*; which is compoſed of many Florets, as is repreſented at *d*; the Border or Rays being compoſed of female Florets, repreſented at *e*, which are barren; but the Diſk or Middle is compoſed of hermaphrodite Florets which have Tubes, as is ſhewn at *f*, which are cut into Five Parts at the Top, out of which the Style ariſes, which is bifid and reflexed, as is repreſented at *g*; theſe ſit on the Germen *h*, which afterwards becomes an oblong Seed *i*, crowned with Down. It flowers in *July*, but rarely ripens its Seeds in *England*. The Flowers are of a bright yellow, and the Leaves being as it were candied, the Plants make a pretty Appearance.

Fig. 2. JACEA *calycibus capillaribus recurvatis, verticillato-folioſis, foliis radicalibus ovato-oblongis, caulinis dentatis.* Knapweed with hairy Empalements, which are recurved, and have a Whorl of Leaves under the Head, the lower Leaves at the Root being of an oblong oval, and thoſe on the Stalks are indented.

This Plant grows naturally in *Portugal*, from whence the Seeds were ſent me by *Robert Moore*, Eſq; with ſeveral other curious Sorts of Seeds and Roots. This Plant is biennial, the Root always periſhing ſoon after the Seeds are ripe. The Leaves which firſt ariſe are of an oblong oval Shape; but thoſe which come out afterwards are divided. The Stalks riſe upwards of Two Feet high, and are garniſhed with long narrow pointed Leaves, which are indented on their Edges, and frequently grow in Cluſters, as is repreſented at *a*: Theſe Stalks divide into ſeveral Branches, which are garniſhed with Leaves of the ſame Shape, but ſmaller; and are terminated by Heads of purple Flowers, the Borders of which are compoſed of female barren Flowers, repreſented at *b*, which are deeply cut at the Top into Five acute Segments repreſented at *f*; theſe form the Rays of the Flower, and ſtand on ſhort Footſtalks, without the Empalement of the Flower, repreſented at *d*, which is compoſed of many Scales, edged about with long Hairs which turn downward; under which is ſituated a Whorl of long Leaves of the ſame Form with thoſe which grow on the Stalks. The Center or Diſk of the Flower is compoſed of many hermaphrodite Florets, repreſented at *e*, which are tubulous, and cut into Five Parts at the Top; theſe ſit on an oblong Germen, marked *g*, having Five Stamina, which are ſhorter than the Tube, ſurrounding a bifid Style, marked *h*, which riſes above the Tube: The Germen afterwards becomes an oval Seed crowned with Down, repreſented at *i*. This Plant flowers in *June* and *July*, and the Seeds ripen in the Autumn.

PLATE CLIII.

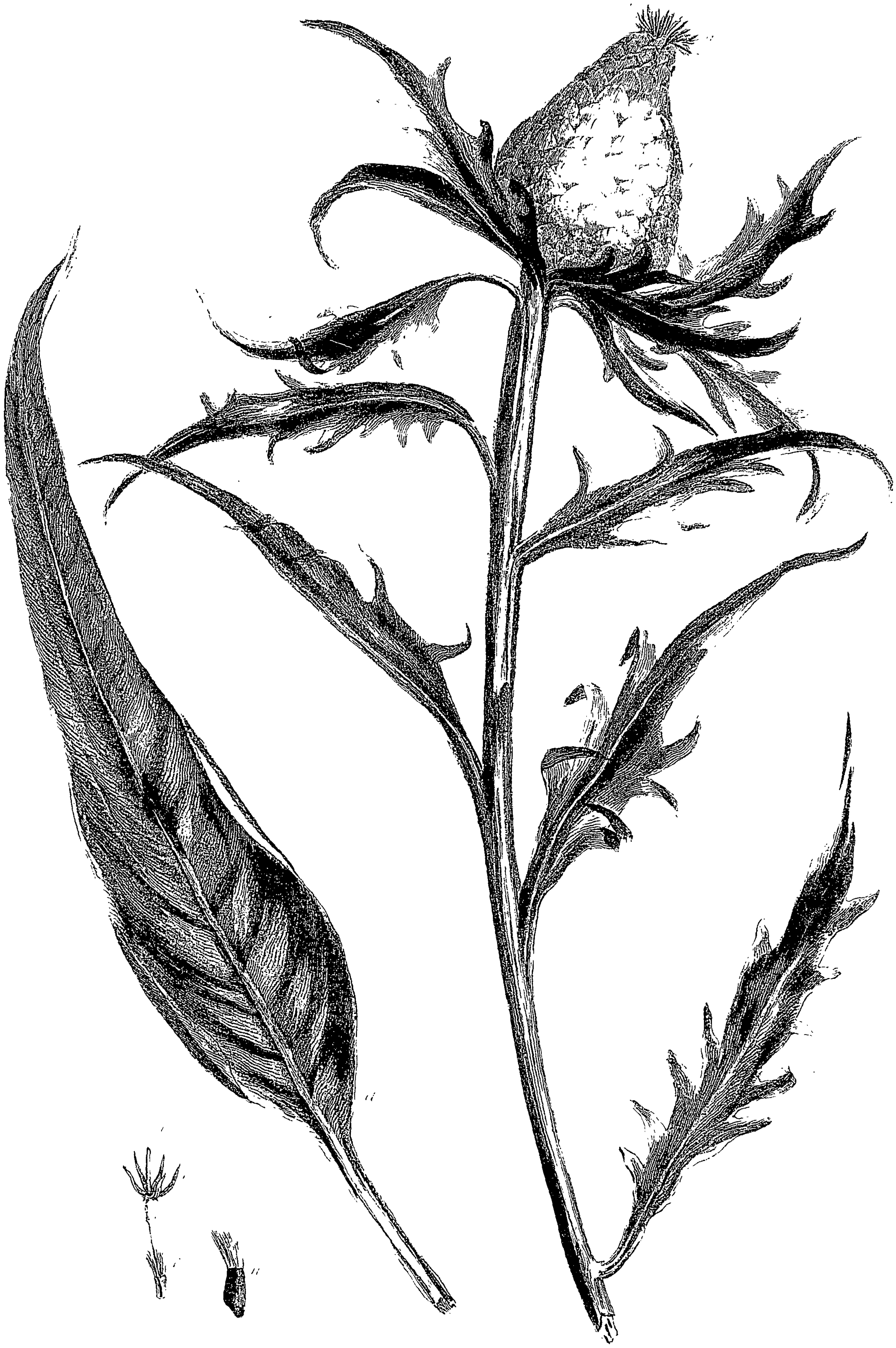
JACEA, *C. B. P.* 272. *Centaurium majus*, *Tourn. Inſt. R. H.* 449. *Centaurea*, *Lin. Gen. Plant.* 808.

THE Characters of this Plant are the ſame as thoſe of the former Plate; and it is ranged by Doctor *Linnæus* under the ſame generical Title; but *Tournefort* ſeparated thoſe Species with large Flowers from the *Jacea*, and conſtituted a Genus, by the old Title of *Centaurium majus*.

The Sort here repreſented is,

JACEA *montana, incana, capite Pini, C. B. P.* 272. Hoary Mountain Knapweed with the Head like a Pine-cone. This is the *Jacea montana, capite magno ſtrobyli, J. B.* 3. *p.* 30. Mountain Knapweed with a large Head like a Cone. *Tournefort* titles it *Centaurium majus incanum, humile, capite Pini, Inſt. R. H.* 449. Hoary Dwarf Greater Centaury with the Head like a Pine-cone. Doctor *Van Royen* titles it *Centaurea calycibus ſquamoſis, foliis tomentoſis, radicalibus lanceolatis, caulinis pinnatifidis, caule ſimplici, Prod. Leyd.* 142. Centaury with a ſcaly Empalement, woolly Leaves, thoſe at the Bottom being Spear-ſhaped, and thoſe on the Stalks having many winged Points, and a ſingle Stalk.

This Plant grows naturally on the Mountains in the South of *France* and in *Italy*. The Seeds of it were ſent me from *Verona*, near which Place it grows in Plenty. It hath a perennial Tap-root, which runs deep into the Ground like a Carrot, but becomes woody by Age, ſending out many Fibres from every Side, which annually decay, and new ones are produced every Spring. Theſe put out ſeveral long Spear-ſhaped Leaves, repreſented at *a*, which are of a pale green on their upper Side, and are covered with a little ſoft Down, but their under Sides are very white and downy: Theſe are Five Inches long, and almoſt Two broad toward their Baſe, ending in acute Points. The Stalks are ſingle, and riſe about Fifteen Inches high, which are garniſhed with long Spear-ſhaped Leaves, regularly indented on both Sides, ſomewhat like a winged Leaf, and the Indentures end in acute Points as is ſhewn at *b*. The Stalks are ſtiff, and channelled, and are terminated by one large pyramidal Head, marked *c*, having a broad ſcaly Empalement, the Scales being convex, and diſpoſed *imbricatim*, like the Scales of Fiſh, or the Tiles of a Houſe, lapping over each other: At the Top of this ſcaly Empalement the Florets juſt peep out, as is repreſented at *d*; for the Empalement is cloſely ſhut at the Top, and being very long, the upper Part of the Florets only appear: Theſe Florets ſit upon the Embryo, as is repreſented at *e*, riſing with a ſlender Tube, which enlarges above, and is deeply cut into Five Segments repreſented at *f*; within the Tube are ſituated Five Stamina, and out of the Middle ariſes a long Style, marked *g*. The Germen, which is ſituated at the Bottom of the Empalement, afterwards becomes an oblong angular Seed crowned with a Down, as repreſented at *h*: But theſe Seeds rarely ripen in *England*; for unleſs the Seaſon is very dry in the Months of *July* and *Auguſt*, which is the Time of their flowering, and the Formation of the Seed, there can be no Expectation of any good Seeds; for the Wet which gets in at the Top of the Empalement, being detained by the Down on the Top of the Germen, cauſes them to rot.



IACEA, *montana, incana, Capite Pini* C. B. P. 272

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PLATE CLVII.

LACTUCA, *Lin. Gen. Plant.* 814. *Tourn. Inſt. R. H.* 473. *Tab.* 267. *Chondrilla, C. B. P.* 130. *Raii Meth. Plant.* 29. Lettuce; *in* French, *Laitue.*

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Nineteenth Claſs, intituled, *Syngeneſia Polygamia Æqualis*; in which Claſs and Section he includes thoſe Plants which have compound Flowers, made up of hermaphrodite Florets, which are fruitful. *Tournefort* places it in the Firſt Section of his Thirteenth Claſs, which includes the Herbs with a floſculous Flower, whoſe Seeds have Down. Mr. *Ray* places it in the Firſt Section of his Sixth Claſs, which includes the Herbs with a compound Flower, whoſe Rays are plain, and the Plants have a milky Juice.

The Characters of this Genus are exhibited in the *Gardeners Dictionary.*

The Species here repreſented is,

LACTUCA *foliis linearibus dentato-pinnatus; laciniis ſurſum dentatis, Lin. Hort. Cliff.* 384. Lettuce with narrow Leaves indented like winged Leaves, whoſe upper Segments are indented. This is the *Lactuca perennis humilior, flore cæruleo, Tourn. Inſt. R. H.* 473. Low perennial Lettuce with a blue Flower. *Caſpar Bauhin* titles it *Chondrilla cærulea altera Cichorii ſylveſtris folio, Pin.* 130. Another blue Gum-Cicory with a Leaf like the wild Cicory.

This Plant grows naturally in *Auſtria*, *France*, and *Italy*; and is here frequently preſerved in Gardens for the ſake of Variety. It hath a perennial Root compoſed of many long fleſhy Fibres, which abound with a milky Juice. Theſe ſpread pretty far in the Ground, and frequently put out Plants at ſome Diſtance, ſo that it is frequently propagated by theſe Suckers. From the Root ariſe ſeveral ſtrong Stalks, which divide, towards the Top, into ſeveral Branches. The Leaves, which are near the Root, are Nine or Ten Inches long; and have Six or Seven deep Jags almoſt to the Midrib, whereby they have ſome Reſemblance to winged Leaves. Theſe Jags are indented on their upper Side into acute Points. The Leaves are ſhorter which grow upon the Stalks, and have fewer Jags; and thoſe immediately below the Flower-Stalks are almoſt intire. The Flowers are produced at the Top of the Stalks, ſtanding upon ſlender branching Footſtalks: Some of theſe ſuſtain Two, others Three, and ſome Four Flowers. Theſe Flowers have a ſcaly Empalement repreſented at *a*; the lower Scales are ſhort; the other are oblong, and end in acute Points. This common Empalement includes ſeveral Florets, or hermaphrodite Flowers, marked *b*; the Border or Rays which are placed circularly round the Diſk, are plain, ending in obtuſe Points, as is ſhewn at *c*; theſe are of a deep Purple or blue Colour. The Middle, or Diſk, repreſented at *d*, is compoſed of long tubulous Flowers, which are cut into Five Parts at the Top; each of theſe Florets has a Germen ſituated at the Bottom of the Tube, repreſented at *e*, which is crowned with a Down, as is ſhewn at *f*: This Germen afterwards becomes the Seed; and the feathery Down, which is ſituated on the Top, diſperſes the Seeds, when ripe, to a conſiderable Diſtance. The Florets which compoſe the Border or Ray, are alſo hermaphrodite; theſe have a Germen ſituated at their Bottom, as is repreſented at *b*; but as the Tube of theſe Rays is ſhort, ſo the Down ſits immediately on the Top of the Embryo or Germen; and the Style, with the forked reflexed Stigma, riſes conſiderably higher, as is ſhewn at *g*; whereas in thoſe Florets which compoſe the Diſk, the Down is ſituated near the Top of the Tube.

This Plant flowers in *June* and *July*, and the Seeds ripen in *September*, which are ſoon diſperſed by the Wind, when they are ripe; for the Down which before was cloſely united, now is expanded to its full Length; and the Tube of the Flower which covered the Organs of Generation, now ſhrinks and falls down, ſo as to leave the Seeds naked, by which every Gale of Wind carries them off as they are ripened, and the Down will ſupport the Seeds in the Air, till they are diſperſed to a conſiderable Diſtance from the Plants.

PLATE CLVIII.

LAMIUM, *Raii Meth. Plant.* 63. *Meliſſa, Tourn. Inſt. R. H.* 183. *Tab.* 91. *Melittis, Lin. Gen. Plant.* 650. Dead Nettle.

THIS Genus of Plants is ranged in the Fifth Section of Mr. *Ray*'s Fourteenth Claſs, which includes the Herbs whoſe Leaves and Flowers grow in Whorles round the Stalks. *Tournefort* places this Plant under his Genus of *Meliſſa*, or Baum; but as the Flowers of Baum grow in Bunches ſuſtained by a common Footſtalk, and thoſe of this Plant ariſe ſingle from the Joints of the Stalks, it ſhould not be put under that Genus. Doctor *Linnæus* has conſtituted a new Genus for this Plant, to which he gives the Title of *Melittis*; but the Characters which he exhibits of that Genus, do by no means agree to thoſe of this Plant; therefore it may be doubted, if he knows this; for he mentions it as a native Plant in *England*, *Germany*, and other Places, where it was never ſeen, except in Gardens; nor is it often to be found in them; ſo that I believe he never ſaw it: For this Plant exactly agrees with all his Characters of *Lamium*, except that of the upper Lip being intire in *Lamium*, and in this it is indented in Three Parts.

The Sort here exhibited is,

LAMIUM *montanum Meliſſæ folio, C. B. P.* Mountain Dead Nettle with a Baum Leaf. *Tournefort* titles it, *Meliſſa humilis, latifolia, maximo flore purpuraſcente, Inſt. R. H.* 193. Low broad-leaved Baum with a large purpliſh Flower. *John Bauhin* titles it, *Meliſſa adulterina quorundam, amplis foliis & floribus non grati odoris, Hiſt. vol.* ii. *p.* 233. This is the *Meliſſa Tragi, Hiſt.* 12. and the *Meliſſia Fuchſii, Lob. Icon.*

This Plant hath a perennial Root, and an annual Stalk. The Root is compoſed of thick ſtrong Heads, which ſend out a great Number of Fibres, which extend to a conſiderable Diſtance every Way: From theſe Heads ariſe, in the Spring, a Number of Stalks, in proportion to the Size of the Roots; for if the Roots are large and ſtrong, they will ſend out Eight or Ten Stalks; but ſmall Roots have ſeldom more than Two or Three. Theſe Stalks are ſtrong, ſquare, and riſe a Foot and Half high, growing upright, and never branch: Theſe are garniſhed at each Joint with Two Heart-ſhaped Leaves placed oppoſite, which are Four Inches long, and near Three Inches broad in the wideſt Part, terminating with an acute Point: Theſe are deeply ſawed on their Edges, and their upper Surface is very much veined, of a dark green Colour, and ſtand upon long Footſtalks, which have a deep Channel on their upper Side. Cloſe to the Baſe of the Footſtalks come out the Flowers, ſtanding in Whorles cloſe to the Stalks at every Joint, where the Stalks are of a deep purple Colour. The Empalement of the Flower is of One Leaf; the lower Part is tubulous, and a little recurved; the upper Part ſpreads open, and is divided into Five acute Parts: The upper Segment ſtands erect; thoſe on each Side ſit cloſe to the Tube of the Flower; the Two lower Segments are a little reflexed. The Flower is of the Kind which Doctor *Linnæus* titles *ringent*, or grinning, from the upper Part of the Flower reſembling the Chaps of Animals. It hath but One Petal: The lower Part is tubulous, which riſes above the Empalement; then it is ſwelled out greatly at the Chaps, and is divided into Two Lips; the upper Lip riſes above the lower, and is arched at the Top, as is repreſented at *a*; this is ſlightly indented in Three Parts at the Extremity, and is covered with fine Hairs on the Inſide, as at *b*; the Four Stamina ſtand cloſe to this upper Lip, which are alſo arched, and terminated by oblong Summits, which are proſtrate: The lower Lip *c* is reflexed, and divided into Three Parts; thoſe on each Side end in acute Segments, but the Middle one is Heart-ſhaped, and indented at the Brim. The exterior Part of the Flower is purple, but the Inſide is white; and the lower Lip hath many purple Streaks on the Inſide. The Two outer Stamina, marked *d* and *e*, are a little longer than the Two in the Middle. The Style with its forked Stigma repreſented at *f*, in its natural Poſition, is ſituated between the Two inner Stamina. *g* ſhews the Five-pointed Empalement intire, and *h*, *i*, ſhews it cut open, with Four Embryos at the Bottom, and the Style ariſing between them; and *k* repreſents the Four Seeds taken out of the Empalement.

This Plant flowers in *April* and *May*, and the Seeds ripen in *July*. The Leaves and Flowers have the ſame Odour as the common purple Dead Nettle.

PLATE CLIX.

LAPPA, *Tourn. Inſt. R. H.* 450. *Tab.* 256. *Raii Meth. Plant.* 41. *Aretium, Lin. Gen. Plant.* 830. Burdock; *in* French, *Bardane ou Glouteron.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Twelfth Claſs, which includes the Herbs with a floſculous Flower, whoſe Seeds have a Down adhering to them. Mr. *Ray* places it in the Firſt Section of his Ninth Claſs, which contains the Herbs with compound Flowers collected into Heads. Doctor *Linnæus* ranges it in the Firſt Section of his Nineteenth Claſs, intituled, *Syngeneſia Polygamia Æqualis.* The Plants of this Claſs and Section have their Flowers compoſed of all hermaphrodite Florets which are fruitful.

The Characters of this Genus are exhibited in *The Gardeners Dictionary*, under the Article of *Aretium.*

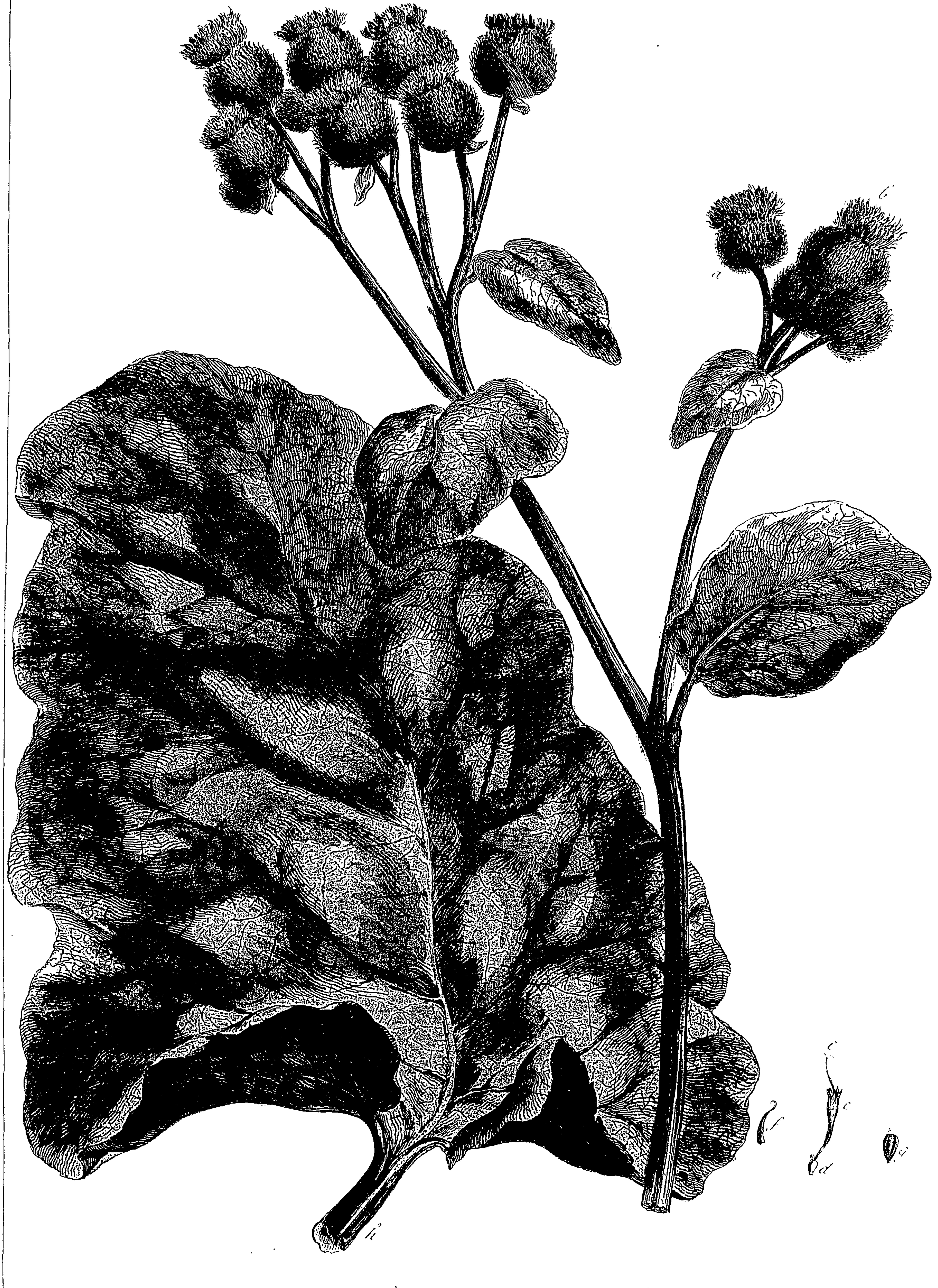
The Species here repreſented are,

LAPPA *major montana, capitulis tomentoſis, ſive Aretium Dioſcoridis, C. B. P.* 198. Greater Mountain Burdock with woolly Heads, or the *Aretium* of *Dioſcorides.* This is the *Aretium foliis cordatis inermibus, capitulis majoribus tomento-reticulatis* of *The Gardeners Dictionary*; i. e. Burdock with Heart-ſhaped Leaves without Spines, and larger Heads which have downy Net-work.

Doctor *Linnæus* has given but One Species of the common Burdock, by which it appears that he ſuppoſes but One diſtinct Sort; but I have cultivated Three, which have always retained their Difference for above Twenty Years; ſo I have enumerated them as ſo many diſtinct Species in *The Gardeners Dictionary.* There is alſo a woolly-headed *Burdock* which grows naturally in *England*, but is very different from this which is here repreſented: The Heads of that are ſmaller, rounder, and not ſo woolly as this. That I ſuppoſe to be only a Variety of the common ſmall-headed *Burdock*; at leaſt the Seeds which I ſowed in the Garden produced Plants of both Sorts: But I have cultivated this Sort above thirty Years, during which Time I never have found it vary.

This Plant is biennial; the Plants which ariſe from Seed, do not flower till the Second Year; and when they have perfected their Seeds, the Root decays. The lower Leaves of this Plant are very large, and are waved on their Edges: They are of a lucid green on their upper Side, but a little hoary on their under, and have a ſoft Down faſtened on them: The Footſtalks which ſuſtain them, are thick and fleſhy, rounded on their under Side, but are flatted on their upper, having a deep Furrow running through the Middle. There are many of theſe Leaves whoſe Footſtalks riſe immediately from the Root, and between theſe come out the Flower-ſtalk, which riſes near Four Feet high: This is thick, and full of Pith within, covered with a channelled Bark, which is compoſed of Threads: It is purple on the Outſide, but white within, dividing upward into many Branches. Theſe are garniſhed at each Joint by One Leaf, nearly of the Shape with thoſe below, but are much ſmaller: The Stalks are terminated by roundiſh Heads of Flowers, growing in looſe Cluſters. The common Empalement of theſe Flowers is finely knotted with a white Down, as is ſhewn at *a*; and have a great Number of ſoft Spines placed all over it: The Head is compoſed of a great Number of hermaphrodite Florets of a purple Colour, repreſented at *b*; theſe have long ſlender Tubes which are enlarged upward, as is ſhewn at *c*; at the Bottom of which is ſituated the Germen, repreſented at *d*, which is crowned with ſhort Down: The Style ariſes from the Top of the Germen, and is terminated by a forked reflexed Stigma, repreſented at *e*; this is attended by Five ſhort Stamina, which are ſituated within the Tube; the Germen afterward becomes an oval-cornered Seed, crowned with a ſhort Down, as is repreſented at *g*.

It flowers in *June*, and the Seeds ripen in *September*; after which the Root decays: But if the Seeds are permitted to ſcatter, the Plants will come up the following Spring, and thrive without any Care.



LAPPA, *major montana, capitulis tomentoſis, ſive Arctium Dioſcoridis C. B. P. 198.*

R. Lancake delin.
Miller Sculp.
Publiſh'd according to Act of Parliament by P. Miller May 30 1757.

PLATE CLX.

LATHYRUS, *Tourn. Inſt. R. H.* 394. *Tab.* 217. *Raii Meth. Plant.* 103. *Lin. Gen. Plant.* 781 Chichling or Everlaſting Pea; *in* French, *Geſſe.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Tenth Claſs, which includes the Herbs with a papilionaceous Flower, whoſe Pointal turns into a long unicapſular Pod. Mr. *Ray* places it in the Firſt Section of his Twenty-firſt Claſs, in which he ranges the Herbs with a papilionaceous Flower, which are not trifoliate, having ſingle Pods, not jointed. Doctor *Linnæus* ranges it in the Third Section of his Seventeenth Claſs, intituled, *Diadelphia Decandria.* The Flowers of this Claſs and Section have Ten Stamina, Nine of which are joined, and One ſtands ſingle: To which Genus he has joined the *Aphaca* and *Clymenum* of *Tournefort*, and the *Niſſolia.*

The Characters of this Genus are exhibited in *The Gardeners Dictionary.*

The Species here repreſented is,

LATHYRUS *latifolius minor, flore majore, Boerh. Ind. Alt.* 2. 58. Smaller broad-leaved Chichling or Everlaſting Pea with a large Flower.

This particular Sort is not mentioned by any other Author than Doctor *Boerhaave*; ſo that many have ſuppoſed it to be only an accidental Variety from the common *Everlaſting Pea*: But I have cultivated this from Seeds above Thirty Years, and have always found the Plants which have been raiſed from Seeds, continue the ſame with the Parent Plant, ſo that I am certain of its being a diſtinct Sort; for I have ſown the Seeds of the common Sort, and of another which approaches near to the common, ſeveral Times, and have never found them vary. The common Sort of *Everlaſting Pea*, is tituled by Doctor *Linnæus*, *Lathyrus pedunculis multifloris, cirrhis diphyllis, foliolis lanceolatis, internodiis membranaceis, Hort. Cliff.* 367. Chichling with many Flowers on a Footſtalk, a Two-leaved Tendril, Spear-ſhaped Leaves, and Membranes running between the Joints.

This Plant hath a thick Tap-root, which runs Three or Four Feet into the Ground, dividing into ſeveral ſtrong Fibres, which extend themſelves far on every Side: From the Crown of theſe Roots ariſe ſeveral trailing herbaceous Stalks, which grow about Three Feet high, dividing into ſeveral Branches: Theſe have Two leafy Wings or Membranes which run along the Stalks between the Joints, as is ſhewn at *a*, and are connected with Two membranaceous Leaves, which come out on each Side the Stalk at every Joint, One of which is much larger than the other, both ending in acute Points; theſe are repreſented at *b*: Juſt above theſe Two Appendages ariſe the larger Leaves; theſe have a broad leafy Footſtalk, ſuſtaining Two Spear-ſhaped Leaves, between which comes out the Claſper or Tendril, marked *c*, which is compoſed of Two Pair of Tendrils, as is repreſented at *d*, which faſten themſelves to any neighbouring Prop, whereby their Branches are ſupported from falling to the Ground. On the oppoſite Side of the Stalk from the Leaves, ariſes the Footſtalk of the Flowers, which is about Nine Inches long, the lower Parts of which are naked; but they are terminated by a looſe Spike or Thyrſe of Flowers, each ſtanding upon a ſhort Footſtalk; theſe are of the Butterfly or Pea-bloom Kind, conſiſting of a large erect Petal, called *The Standard*, repreſented at *e*, which is of a beautiful red Colour, and of the Keel which is repreſented at *f*, which is of a whitiſh Colour, and Two red Wings which join on each Side the Keel; theſe are fixed in a ſhort Empalement divided into Five acute Parts, as is repreſented at *g*; the Nine Stamina which coaleſce, are ſhewn at *h*; and the ſingle one which ſtands apart, at *i*; the oblong Germen is ſituated in the Bottom of the Flower, ſupports a ſingle Style, crowned by an oblong Stigma, is ſhewn at *k*: The Germen afterward becomes a long Pod, repreſented at *l*, which opens with Two Valves, as is ſhewn at *m*, containing One Row of Kidney-ſhaped Seeds, repreſented at *n*.

This Plant flowers the latter End of *June*; and if the Seaſon is not very warm, it will continue till the End of *July*; and the Seeds ripen in *September*. When theſe Plants are properly diſpoſed in a Garden, and their Branches are ſupported by Stakes, they make a very good Appearance during the Time they are in Flower; but if their Branches are ſuffered to fall on the Ground, they will injure the Plants which are near them, and appear diſagreeable.

PLATE CLXI.

LAVATERA, *Tourn. Act. Reg. Scien.* 1706. *Dillen. Gen. Nov.* 10. *Lin. Gen. Plant.* 752.

THIS is one of the malvaceous Tribe, which, according to *Tournefort*'s Syſtem, muſt be ranged in the Sixth Section of his Firſt Claſs, which includes the Herbs with a Bell-ſhaped Flower of One Leaf, from the Bottom of whoſe Tube ariſes a Pointal, which becomes a Fruit with many Capſules. Doctor *Linnæus* ranges it in the Third Section of his Sixteenth Claſs, intituled, *Monadelphia Polyandria*, the Flowers having many Stamina, which adhere to the Style, and together form a ſort of Column.

The Species here repreſented are,

Fig. 1. LAVATERA *foliis quinquelobatis hirſutis, caule erecto fruticoſo.* Lavatera whoſe Leaves have Five Lobes and are hairy, with an upright ſhrubby Stalk.

This Plant grows naturally at the *Cape of Good Hope*, from whence the Seeds were ſent to the Phyſic Garden at *Amſterdam*, where they ſucceeded, and produced ripe Seeds, Part of which were ſent me by the ingenious Mr. *Storm*, who has the Care of that Garden. This riſes with a ſhrubby Stalk to the Height of Eight or Ten Feet, ſending out many Side-branches, which are garniſhed with large hairy Leaves, divided deeply into Five Lobes: Theſe are indented on their Borders, as is repreſented at *a*; they are of a lively green Colour, and are placed alternate, ſtanding upon long Footſtalks. The Stalks are covered with a brown Bark, as is ſhewn at *b*; the Flowers come out ſingly from the Side of the Branches, as is repreſented at *c*; theſe have a double Empalement; the outer is compoſed of One Leaf, cut at the Top into Three Parts; the inner is of One Leaf, cut into Five Parts at the Top; both theſe are permanent. The Flower is compoſed of Five or Six Heart-ſhaped Petals, which are joined at their Baſe, repreſented at *d*; theſe are of a reddiſh purple Colour, and in the Center riſes the Column, ſhewn at *e*, in which the Organs of Generation are joined into one Body: After the Flower is paſt, the Germen becomes a compreſſed Five-cornered Fruit, repreſented at *f*, having Five Capſules, each containing One Kidney-ſhaped Seed, repreſented at *g*. This Genus differs from *Althæa* in the outer Empalement, being cut only in Three Parts, whereas that of *Althæa* is cut into Nine; and the Seeds of *Lavatera* have a Cover before them, but thoſe of *Althæa* are open like the *Mallow*.

Fig. 2. LAVATERA *foliis glabris, caule ſcabro herbaceo, floribus lateralibus pedunculis longiſſimis.* Lavatera with ſmooth Leaves, a rough Stalk which is herbaceous, and Flowers growing from the Side of the Stalks on very long Footſtalks. This is the *Lavatera Africana flore pulcherrimo, Boerh. Ind. Alt.* 1. *African* Lavatera with a moſt beautiful Flower.

This is an annual Plant, which riſes with an herbaceous branching Stalk, about Two Feet high, garniſhed with One Leaf at each Joint. The lower Leaves are roundiſh; and thoſe which are placed a little higher, have an Angle on each Side; but the upper Leaves are ſhaped like the Point of an Halbert, and have ſhort Footſtalks, whereas thoſe on the lower Part are very long and ſlender. They are ſmooth, and of a light green; the Flowers ſtand upon very long Footſtalks, which come out from the Wings of the Leaves; ſometimes Two ariſe from the ſame Joint, but in general there is only One. The outer Empalement of the Flower is ſhort, angular, and ſlightly cut into Three Parts; the inner riſes above this and is pointed, being cut into Five acute Segments. The Flower is for the moſt part compoſed of Five large Heart-ſhaped Petals, which are joined at their Baſe, and fall off together; ſo the Flower is termed *Monopetalous*, or of One Petal. It is of a beautiful Roſe Colour with a purple Bottom, from which are ſpread a few purple Streaks, as is repreſented at *a*: After the Flower is paſt, the double Empalement becomes the Fruit marked *b*, compoſed of many Cells, in which the Seeds are placed, as is repreſented at *c*, where the Cover is taken off to ſhew how they are ranged.

PLATE CLXII.

LEONORUS, *Tourn. Inſt. R. H.* 187. *Tab.* 87. *Raii Meth. Plant.* 64. *Phlomis, Lin. Gen.* 642. Lions-tail; *in* French, *Queue de Lion.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Fourth Claſs, which includes the Herb with a Lip-Flower of One Leaf, whoſe upper Lip is hollow like a Spoon. Mr. *Ray* places it in the Fifth Section of his Fourteenth Claſs, in which he joins the Plants whoſe Flowers grow in Whorles from the Wings of the Leaves. Doctor *Linnæus* has joined the Plants of this Genus to thoſe of *Phlomis*, and has given the Title of *Leonurus* to the *Cardiaca*; but if he had joined the *Leonurus* to the *Cardiaca*, their Characters agree better than thoſe of *Phlomis*.

The Species here repreſented is,

Fig. 1. LEONURUS *minor, Capitis Bonæ Spei vulgò Boerh. Ind. alt.* 180. Smaller Lions-tail of the *Cape of Good Hope.* This is probably the *Leonurus Americanus, Nepetæ folio, flore phœnicio minore, Breyn. Prod.* 2. i. e. *American* Lions-tail with a Catmint Leaf, and a ſmaller ſcarlet Flower. But this Plant is not annual, nor was it brought from *America*, ſo that it doth not agree with that Title; yet by the Deſcription given of it, this Plant is undoubtedly what they meant; for *Breynius*'s Title was given from a dried Specimen, and not from the growing Plant; ſo he might be eaſily deceived, eſpecially as he received it by the following Title: *Cardiaca Americana annua Nepetæ folio, floribus brevibus phœniceis, H. L.* i. e. Annual *American* Motherwort with a Catmint Leaf, and a ſhort ſcarlet Flower.

This Plant riſes with a ſquare ligneous Stalk about Three Feet high, dividing into ſhort Branches, which are garniſhed with ſhort crenated Leaves, repreſented at *a*, which have the Appearance of thoſe of Catmint; theſe are placed oppoſite, and at the Baſe of the Footſtalk ariſe Two ſmall Branches ſet with very ſmall Leaves of the ſame Shape. The Flowers grow in Whorles round the Stalk, as is repreſented at *b*, ſitting very cloſe without any Footſtalks; the upper Lip of the Flower is ſtretched out to a great Length, and is ſet with Hairs on the Inſide, as is repreſented at *c*; the lower Lip is very ſhort, and is divided into Three Parts, as is ſhewn at *d*; the Four Stamina are repreſented at *e*; Two of which are a little ſhorter than the other. Between theſe ariſe the Style, marked *f*; and *g* ſhews the upper Lip turned back, repreſenting the hollow Spoon-ſhape: The Four-cornered Empalement is repreſented at *h* and *i*, and *k* ſhews the Four Seeds which ſucceed each Flower.

This Plant flowers in *October* and *November*, when it makes a fine Appearance in the Greenhouſe.

Fig. 2. LIGUSTRUM, *Tourn. Inſt. R. H.* 596. *Tab.* 367. *Lin. Gen. Plant.* 18. Privet; *in* French, *Troene.*

Tournefort ranges this Genus of Plants in the Firſt Section of his Twentieth Claſs, which includes the Trees and Shrubs with a Flower of One Petal, whoſe Pointal turns to a ſoft Fruit with hard Seeds. Doctor *Linnæus* ranges it in the Firſt Section of his Second Claſs, intituled, *Diandria Monogynia*, from the Flower having Two Stamina and one Style.

The Species here repreſented is,

LIGUSTRUM, *J. B.* 1. 528. Common Privet. This is the *Liguſtrum Germanicum, C. B. P.* 475. *German* Privet.

This Shrub grows very common in the Hedges in moſt Parts of *England*, but being placed as a medicinal Plant in the Diſpenſary, we have exhibited a Figure of it. This riſes with many ſhrubby Stalks to the Height of Twelve or Fourteen Feet, dividing into ſeveral Branches, which are garniſhed by narrow Leaves placed oppoſite; the Flowers are produced in Panicles at the End of the Branches, as is repreſented at *a*; One of theſe taken from the Bunch is repreſented at *b*, and the Two Stamina are ſhewn at *c*; the Four-cornered Empalement is ſhewn at *d*, and the ſame reverſed at *e*; the Firſt Appearance of the Fruit at *f*, the ſame fully grown at *g* and *h*, and *i* repreſents the Seeds.

This Shrub flowers in *June*, and the Berries ripen in the Autumn. As the Flowers of this are of a pure white, and the Berries are black when ripe, there is little Reaſon to doubt, that *Virgil* alluded to the Flowers and the Berries of this Plant in this Line,

> *Alba Liguſtra cadunt, vaccinia nigra leguntur*;

rather than ſuppoſe he alluded to the Flowers of one, and the Berries of another; for the Berries of the *Privet* were formerly uſed in *Italy* for making of Ink, and alſo for dying.

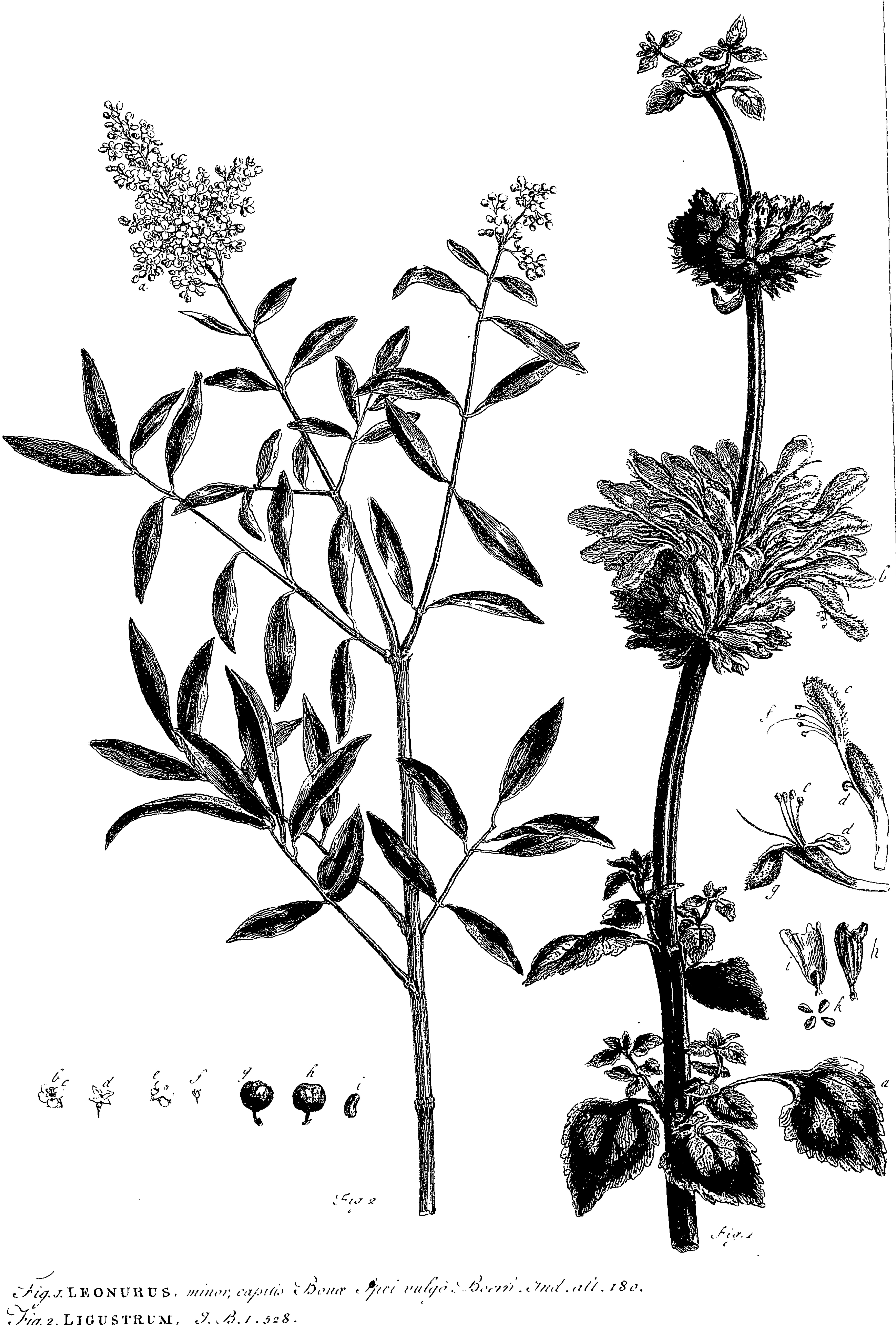


Fig. 1. **LEONURUS**, *minor, capitis Bonæ Spei vulgò Boerh. Ind. alt. 180.*
Fig. 2. **LIGUSTRUM**, *J. B. 1. 528.*

R. Lancake delin.
J. Miller Sculp.

Publish'd according to Act of Parliament by P. Miller May 30. 1757.

PLATE CLXVI.

LINARIA, *Tourn. Inſt. R. H.* 168. *Tab.* 76. *Raii Meth. Plant.* 90. *Antirrhinum, Lin. Gen. Plant.* 668. Toad-flax; *in* French, *Linaire.*

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Third Claſs, which includes the Herbs with a tubulous, anomalous, perſonated Flower of One Petal. Mr. *Ray* places it in the Second Section of his Nineteenth Claſs, which contains the Herbs with a labiated Flower, having Spurs or Heels. Doctor *Linnæus* has joined this Genus to the *Antirrhinum*, in which, I think, he has erred; for as there are ſeveral Species of each Genus, ſo when there is ſuch a diſtinguiſhing Character as that of the Flowers of the *Linaria* having a Spur or Heel, which is not in thoſe of the *Antirrhinum*, they ſhould be kept under their former Titles to avoid Confuſion. He places this Genus in the Second Section of his Fourteenth Claſs, which includes the Plants whoſe Flowers have Two long and Two ſhorter Stamina, and the Seeds are contained in Capſules.

The Species here repreſented are,

Fig. 1. LINARIA *Hiſpanica procumbens, foliis uncialibus glaucis, flore flaveſcente pulchre ſtriato labiis nigro purpureis, Act. Reg. Lond.* 17. Trailing *Spaniſh* Toad-flax with glaucous Leaves an Inch long, yellow Flowers beautifully ſtriped, and a black-purple Lip. This is the *Linaria triſtis Hiſpanica, Hort. Elth.* 201. Mournful *Spaniſh* Toad-flax. Doctor *Linnæus* titles this *Antirrhinum foliis lanceolatis ſparſis; inferioribus oppoſitis, nectariis ſubulatis, floribus ſubſeſſilibus, Hort. Cliff.* 498. Snapdragon with Spear-ſhaped Leaves placed ſparſedly, the lower being oppoſite, an Awl-ſhaped Nectarium, and Flowers ſitting cloſe to the Stalks.

This Plant grows naturally on the Rocks about *Gibraltar*, from whence the late Sir *Charles Wager* brought the Seeds, which were ſown in his Garden at *Parſons Green*, near *Fulham*, where they ſucceeded, and many of the curious Gardens were furniſhed from thence with the Plants. The Root is perennial, ſending out many ſucculent Stalks, moſt of which trail on the Ground, but thoſe from the Center do often riſe Nine or Ten Inches high; they are garniſhed with ſhort ſucculent Leaves, about an Inch long and One-fifth of an Inch broad, of a Sea-green Colour; the Flowers are produced at the End of the Branches, theſe have a long Heel or Spur, repreſented at *a*, of a darkiſh yellow Colour, with ſome purple Lines; the lower Lip of the Flower, marked *b*, is of a dark Purple, and the upper Lip, repreſented at *c*, is of the ſame yellow Colour as the Heel, and marked with dark Lines in the ſame manner: This Plant flowers in *June* and *July*, but doth not produce Seeds in *England*.

Fig. 2. LINUM, *Tourn. Inſt. R. H.* 339. *Tab.* 176. *Raii Meth. Plant.* 112. *Lin. Gen. Plant.* 349. Flax; *in* French, *Lin.*

This Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Eighth Claſs, which includes the Herbs with a Clove Gillyflower Flower, whoſe Pointal becomes a Fruit. Mr. *Ray* ranges it in the Second Section of his Twenty-ſecond Claſs, which contains the Plants whoſe Flowers are regular and have Five Leaves, and whoſe Leaves are placed alternate upon the Stalks. Doctor *Linnæus* places it in the Fifth Section of his Fifth Claſs, which includes the Plants whoſe Flowers have Five Stamina, and Five Styles.

The Species here repreſented is,

LINUM *calycibus capſuliſque obtuſis, foliis alternis lanceolatis, acutis, caulibus ramoſiſſimis.* Flax with obtuſe Empalements and Capſules, Spear-ſhaped acute Leaves placed alternate, and very branching Stalks, commonly called *Siberian Flax.* This is probably the *Linum calycibus capſuliſque obtuſis, foliis alternis lanceolatis integerrimis, Lin. Sp. Plant.* 277. Flax with obtuſe Empalements and Capſules, and intire Spear-ſhaped Leaves placed alternate; but the Doctor has added a *Synonima* of *Moriſſon* to it, by which he makes it the ſame with our *Engliſh Perennial*, from which it differs in having very branching Stalks, longer and broader Leaves, larger Flowers, and the Seed-veſſels are much larger and more obtuſe. Theſe Differences are permanent when the Two Sorts are cultivated on the ſame Soil and in the ſame Situation, therefore I conclude they are ſpecifically different.

This hath a perennial Root, which will abide ſeveral Years, ſending out many Stalks in proportion to the Size of the Roots: Theſe in a rich moiſt Soil, will grow from Four to Five Feet high, but in very middling Ground will be Three Feet high; they are ſtrong, and divide upward into many Branches; theſe are garniſhed with narrow Spear-ſhaped Leaves placed alternate; they are little more than One Inch long, and One-eighth of an Inch broad, of a deep green Colour, ending in acute Points. The Flowers are produced toward the End of the Branches, coming out from the Side of the Stalk, having pretty long Footſtalks; theſe are compoſed of Five large roundiſh Petals, marked *a*, which are of a fine blue Colour; in the Center of the Flower are ſituated Five Stamina and Five Styles, which are repreſented at *b*; the Petals of the Flower are a little indented at the Brim, as is ſhewn at *c*; and at *d*, the Reverſe of the Flower is repreſented to ſhew the Empalement: *e*, ſhews the Five Stamina terminated by round Summits; *g*, repreſents the Capſule intire; *h*, the ſame cut tranſverſly to ſhew the Ten Cells; *i*, the ſame opened lengthways; *k*, One of the Cells ſeparated from the Capſule; and *l*, is One of the Seeds taken out of the Capſule. This Plant flowers in *June* and *July*, and the Seeds ripen in *Auguſt* and *September*.

As this hath a perennial Root, ſo it may be well worth cultivating for Uſe, becauſe it comes ſo much earlier in the Seaſon than the annual Sort which is generally cultivated in *England*; which is a great Advantage, for the Autumns frequently prove ſo wet, as to render it difficult to get the late Crops of Flax properly houſed. Beſides the Produce of this Sort is much greater than of the other, and although the Threads of this are not ſo fine, yet for the common Purpoſes it is full as good, and the Threads are ſtronger, therefore may be of great Service to the Public, if it is cultivated in Quantities ſufficient for Uſe.

PLATE CLXVII.

LONICERA, *Lin. Gen. Plant.* 210. *Chamæceraſus, Tourn. Inſt. R. H.* 609. *Tab.* 379. *Raii Meth. Plant.* 145. Upright, *or* Fly-Honeyſuckle.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina, and but One Style. To this Genus Doctor *Linnæus* has added the *Caprifolium, Periclymenum* and *Xyloſteum* of *Tournefort*, and the *Symphoricarpos* of *Dillenius*; but from the Structure of their Flowers and Fruits, ſome of theſe ſhould be kept ſeparate. *Tournefort* places it in the Sixth Section of his Twentieth Claſs, which contains the Trees and Shrubs with a Flower of One Petal, whoſe Empalement turns to a Berry. Mr. *Ray* places it among the Trees which bear umbilicated Berries having ſeveral Seeds.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here repreſented are,

Fig. 1. LONICERA *pedunculis bifloris, baccis diſtinctis, foliis integerrimis pubeſcentibus, Prod. Leyd.* 238. Lonicera with Two Flowers on each Footſtalk, diſtinct Berries, and intire Leaves, which are woolly. This is the *Chamæceraſus dumetorum fructu gemino rubro, C. B. P.* 451. Dwarf Cherry with a double red Fruit, commonly called the *Fly Honeyſuckle. John Baukin* titles it *Periclymenum rectum, fructu rubro, Hiſt.* 2. *p.* 206. Upright Honeyſuckle, with red Fruit.

This grows naturally upon the *Alps*, and in Woods in many of the cold Parts of *Europe*, but has been long cultivated, as a flowering Shrub, in the Nurſery Gardens. It riſes with a thick woody Stalk to the Height of Five or Six Feet, and divides into many Branches, which have a ſmooth Bark, and are garniſhed with oval Leaves which are intire; they are of a pale Green, and are covered with ſoft Down, theſe are placed oppoſite, having ſhort Footſtalks. The Flowers come out on each Side of the Branches upon ſlender Footſtalks, each ſuſtaining Two Flowers, as is repreſented at *a*; theſe have but One Petal, which is divided into Two Lips. In the Center of the Flower are ſituated Two Germina, marked *b*, having a ſhort Style, which is attended by Five Stamina, repreſented at *c*; theſe are terminated by oblong Summits, which are ſhewn at *e*: Both theſe Flowers are cloſely joined at their Baſe, as is repreſented at *d*. The Two Germina afterward are turned to Two Berries, marked *e*, which when ripe are red. It flowers in *May*, and the Berries ripen in *Auguſt*.

Fig. 2. LONICERA *pedunculis bifloris, baccis coadunatis didymis, Lin. Sp. Plant.* 174. Lonicera with Two Flowers upon a Footſtalk, and Two Berries, which are joined. This is the *Chamæceraſus Alpina, fructu rubro gemino, duobus punctis notato, C. B. P.* 451. Dwarf Cherry of the *Alps*, with twin red Fruit marked with Two Points, commonly called *Red-berried Upright Honeyſuckle.*

This riſes with an upright woody Stalk about Four Feet high, ſending out many Branches, which grow erect, and are garniſhed with oval Spear-ſhaped Leaves Three Inches long, and an Inch and half broad, ending in acute Points. They are of a dark Green, and are placed by Pairs oppoſite, ſtanding upon ſhort Footſtalks: The Flowers are produced on the Side of the Branches, ſtanding upon long Footſtalks, each ſupporting Two Flowers. The Footſtalks ariſe on each Side of the Branches, from the Wings of the Leaves; they are Two Inches long, but very ſlender. The Flowers have but One Petal, which is divided into Two Lips, as is repreſented at *a*; they are of a purple Colour: The upper Lip is indented at the Brim, but the lower Lip is intire. In the Center ariſe the Five Stamina, which are terminated by oblong purple Summits. When the Flowers firſt appear they ſtand erect and are cloſed, as is ſhewn at *c*, where the Backſide of the Flowers are repreſented, but afterward they open and ſhew the Stamina. After the Flowers decay, the twin Germina, marked *d*, turn to Two red Berries, which are joined together. This flowers about the ſame Time with the former, and the Seeds ripen in the Autumn. It grows naturally on the *Alps*, but is propagated for Sale in the Nurſery Gardens as a flowering Shrub.

PLATE CLXVIII.

LOTUS, *Lin. Gen. Plant.* 803. *Tourn. Inſt. R. H.* 402. *Raii Meth. Plant.* 108. Birdsfoot Trefoil; *in* French, *Lotier.*

THIS Genus of Plants is ranged in the Third Section of *Linnæus*'s Seventeenth Claſs, which includes thoſe Plants whoſe Flowers are of the Butterfly Kind, and have Ten Stamina, Nine of which are joined, and One ſtands ſeparate. *Tournefort* places it in the Fourth Section of his Tenth Claſs, which contains the Herbs with a Butterfly Flower, which are three-leaved. It is ranged in the Second Section of Mr. *Ray*'s Twenty-firſt Claſs, which includes the leguminous Plants which are three-leaved.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here repreſented is,

LOTUS *leguminibus ſubternatis, caule herbaceo erecto, foliolis linearibus, Lin. Sp. Plant.* 775. Birdsfoot Trefoil, with Pods growing by Threes, an upright herbaceous Stalk and very narrow Leaves. This is the *Lotus anguſtifolia, flore luteo purpuraſcente, ex Inſula ſancti Jacobi, Hort. Amſt.* 2. *p.* 165. Narrow-leaved Birdsfoot Trefoil from the Iſland of *Saint James*, with a purple yellow Flower.

This hath a ſlender ligneous Stalk, which divides into many ſlender Branches, which are herbaceous; theſe riſe near Three Feet high, and are garniſhed with very narrow Leaves, which are ſometimes by Threes, but generally Five upon each Footſtalk. They are of a pale Green, inclining to a hoary Colour, and ſit very cloſe to the Branches. The Flowers are produced at the End of the Branches by Two, Three, or Four in each Cluſter: They are of the Butterfly or Pea Bloom Kind, having Four Petals. The lower, which is marked *a*, is the Keel (*Carina*); the Two Side Petals, marked *b*, are the Wings (*Alæ*); and the upper Petal, marked *c*, is the Standard (*Vexillum*). In the Center of the Flower is ſituated the Stamina and Style, which are included in the Keel; theſe are repreſented at *d*. The Style riſes from the narrow oblong Germen, marked *e*, ſituate within the Empalement, but is repreſented at *f*, where it is ſeparated from it, and the Nine Stamina which are joined, are repreſented at *g*, with the ſingle One ſtanding ſeparate, marked *h*. The Germen afterwards turns to a ſlender Pod, marked *i*, which opens with Two Valves, as is repreſented at *k*, containing One Row of ſmall Seeds, marked *l*.

This Plant, when properly managed, continues flowering almoſt through the Year, and will produce Plenty of good Seeds.

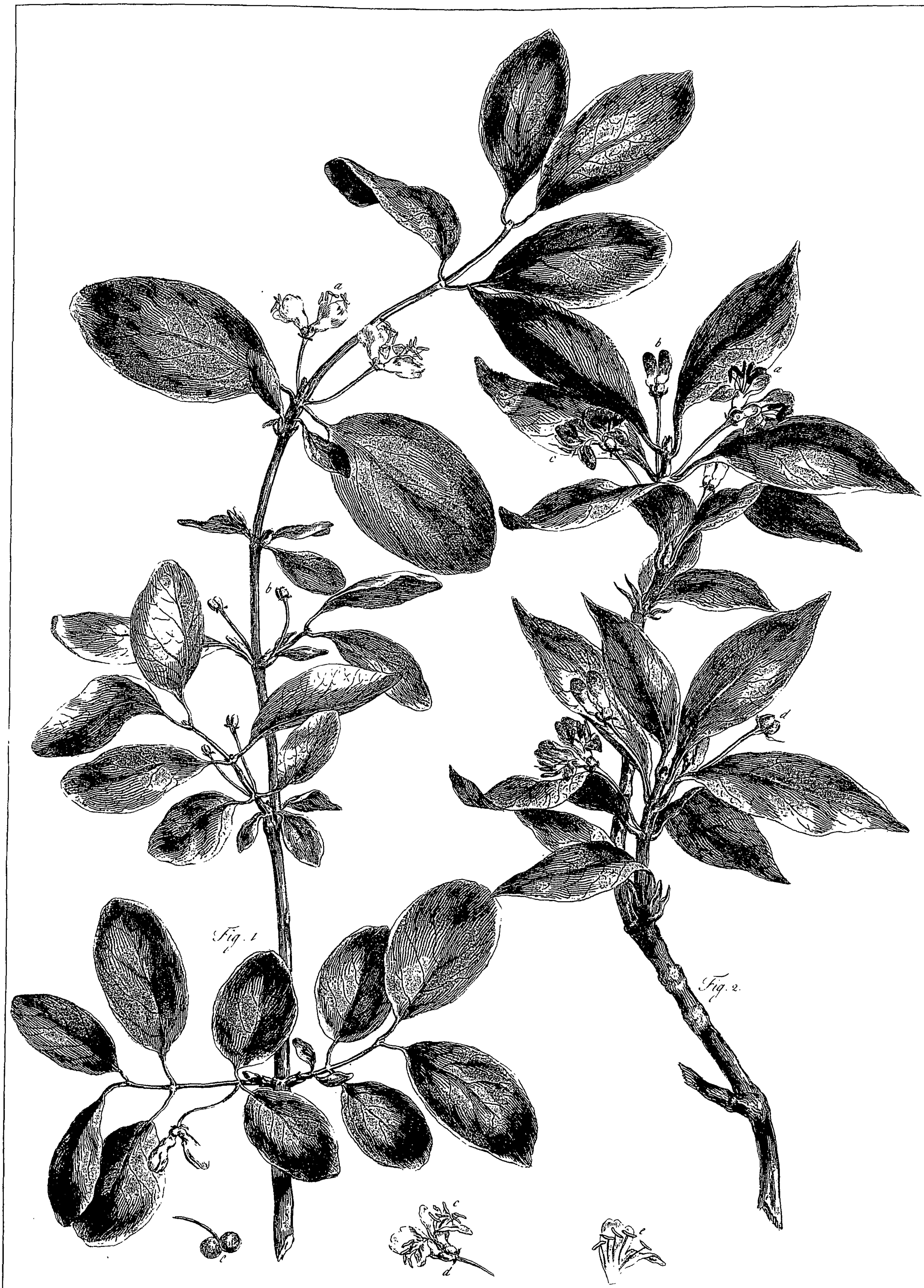


Fig. 1. **LONICERA**, *pedunculis bifloris, baccis distinctis, foliis integerrimis pubeſcentibus Prod. Leyd.* 238.
Fig. 2. **LONICERA**, *pedunculis bifloris, baccis coadunatis didymis Lin. Sp. plant.* 174.

R Lancake delin
I Miller Sculp

Publiſhd according to Act of Parliament by P. Miller. June 27. 1757.

PLATE CLXIX.

LUNARIA, *Tourn. Inſt. R. H.* 218. *Tab.* 105. *Raii Meth.* 95. *Cardamine, Lin. Gen. Plant.* 727. Moonwort, Honeſty, or White Sattin. In *French*, *Lunaire*, or *Bulbonac.*

THIS Genus of Plants is ranged in the Third Section of *Tournefort*'s Fifth Claſs of Plants, which includes the Herbs with a Croſs-ſhape Flower, whoſe Pointal turns to a Fruit, with Two Parallel Valves, divided by an intermediate Partition. Mr. *Ray* places it in the Firſt Section of his Twentieth Claſs, which contains the Plants whoſe Flowers have Four Petals, and are ſucceeded by Pods with Two Cells, divided by a membranaceous Partition. Doctor *Linnæus* ranges it in the Second Section of his Fifteenth Claſs, which includes thoſe Plants whoſe Flowers have Four long and Two Shorter Stamina, and are ſucceeded by Pods. The Characters of this Genus are exhibited in the *Gardeners Dictionary.*

The Species here repreſented is,

LUNARIA, *foliis ſupradecompoſitis, foliolis trifidis, ſiliquis oblongis pendulis.* Moonwort or Honeſty, with decompounded Leaves, whoſe Lobes or ſmall Leaves are trifid, and oblong hanging Pods. This is the *Cardamine foliis ſupradecompoſitis, ſiliquis unilocularibus pendulis. Lin. Sp. Plant.* 656. Ladies Smock, with decompounded Leaves and hanging Pods with One Cell.

This is an annual Plant which grows naturally in *Egypt*, from whence the Seeds were brought a few Years ſince to the *Royal Garden* at *Paris.* This riſes with a ſmooth branching Stalk about Fifteen Inches high, garniſhed with winged Leaves, repreſented at *a*. Theſe are compoſed of ſeveral Pairs of Lobes ſet along the Midrib, and terminated by an odd one. Theſe Lobes are of different Sizes; ſome are almoſt intire, but the greater Part of them are cut at their Extremity into Three Parts, as is ſhewn at *b*; they are ſmooth and of a lucid Green. The Flowers are produced from the Side of the Stalks, and alſo at End of the Branches, each ſtanding upon a ſhort ſeparate Footſtalk; theſe have an Empalement of Four Leaves, which cloſely embrace the Petals, repreſented at *c*, which falls off with the Petals. The Flowers are compoſed of Four roundiſh Petals, indented at the Top, repreſented at *d*; theſe are of a purple Colour, and ſpread open above the Empalement. In the Tube of the Flower is ſituated an oblong Germen, as is ſhewn at *e*, upon which are fixed the Four long Stamina marked *f*; and below theſe the Two ſhorter marked *g*. In the Middle of theſe is ſituated a ſlender Style, crowned by an erect narrow Stigma. When the Flowers fall away, the Germen becomes an oblong compreſſed Pod which hangs downward, and is firſt Green; but, when ripe, turns to a *feuille-mort* Colour, opening with Two Valves, as is repreſented at *h* and *i*; in which are lodged Three or Four roundiſh compreſſed Seeds, faſtened to the Side of the Pod. This Plant flowers in *June* and *July*, and the Seeds ripen in *September*, and the Plants ſoon after periſh.

PLATE CLXX.

LUPINUS, *Tourn. Inſt. R. H.* 392. *Tab.* 213. *Raii Meth. Plant.* 104. *Lin. Gen. Plant.* 774. Lupine, in *French*, *Lupin.*

THIS Genus of Plant is ranged in the Second Section of *Tournefort*'s Tenth Claſs of Plants, which includes the Herbs with a Butterfly Flower, whoſe Pointal becomes a long Pod with One Cell. Mr. *Ray* places it in the Second Section of his Twenty-firſt Claſs, in which he ranges the Plants with a Pea Bloſſom and handed Leaves, which do not climb. Doctor *Linnæus* ranges it the Third Section of his Seventeenth Claſs, in which he includes the Plants whoſe Flowers have the Stamina joined in Two Bodies. The Characters of this Genus are exhibited in the *Gardeners Dictionary.*

The Species here repreſented at Fig. 1. is,

LUPINUS, *radice reptatrice perenni, Prod. Leyd.* 531. Lupine, with a perennial creeping Root. This is the *Lupinus cæruleis minor perennis, Virginianus repens, Mor. Hiſt.* 2. *p.* 87. *Sect.* 2. *Tab.* 7. *f.* 6. Small, blue, perennial, creeping Lupine of *Virginia.* Doctor *Linnæus* titles it, *Lupinus, calycibus alternis inappendiculatis, labio ſuperiore emarginato, inferiore integro, Lin. Sp. Plant.* 721. Lupine, with alternate Empalements, having no Appendices, and the upper Lip indented, but the under intire. In the *Flora Virginica* it is titled, *Lupinus, calycibus alternis, radice perenni repente,* 172. Lupine, with alternate Empalements, and a perennial creeping Root.

This Plant grows naturally in *Virginia*, and other Parts of *North America*, from whence the Seeds were brought to *Europe.* It hath a perennial Root which runs very deep into the Ground, and ſpreads to a great Diſtance each Way. The Stalks riſe a Foot and a Half high, which are garniſhed with Hand-ſhaped Leaves, compoſed of ſeveral ſmall Leaves (or Lobes) ariſing from One Center, from Five to Ten in Number; theſe are oblong, and rounded at their Ends. They are ſuſtained by long Footſtalks which come out by Pairs oppoſite, and are of a pale Green. The Flowers terminate the Stalks in long Spikes; they are placed on every Side the Stalks, ſometimes by Pairs; at other times Three or Four Flowers come out at the ſame Joint. They are of a pale blue Colour, and ſhaped like the Flower of Peaſe, as is repreſented at *a*; which ſhews the Front of a ſingle Flower ſeparated from the Spike. *b* repreſents the roundiſh Heart-ſhaped Standard, whoſe Sides are reflexed, and the End is indented. The Two Wings, which are almoſt as long as the Standard, are ſhewn at *c* and *d*. The Sickle-ſhaped Keel is repreſented at *e*; which is ſeparated from the Two Wings, to which it is joined in their natural Poſition. In the Keel are ſituated the Stamina, with the Style, as is repreſented at *f*. Nine of theſe Stamina, with their Summits, are joined in One Body, as is ſhewn at *g*; and One Stamina ſtands ſeparate, as at *h*. The Germen, which is ſituated in the Empalement, ſupporting a ſlender Style, is repreſented at *i*; this afterward turns to a flat oblong Pod, with the Style at the Point, as is ſhewn at *k*. Theſe Pods, when ripe, twiſt up in Two Valves, as at *l*; and caſt out the roundiſh compreſſed Seeds, marked *m*, with an Elaſticity. This Plant flowers in *June*, and the Seeds ripen in *Auguſt*.

Fig. 2. Lychnis, *Tourn. Inſt. R. H.* 333. *Tab.* 175. *Raii Meth. Plant.* 109. *Lin. Gen. Plant.* 22. 517. Catchfly, or Campion.

This Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Eighth Claſs of Plants, which includes the Herbs and Under-ſhrubs with a Clove Gilliflower Flower, whoſe Pointal becomes the Fruit. Mr. *Ray* places it in the Firſt Section of his Twenty-ſecond Claſs, which contains the Plants with Flowers of Five Petals, whoſe Seeds are incloſed in a Capſule. Doctor *Linnæus* ranges it in the Firſt Section of his Tenth Claſs, which includes the Plants whoſe Flowers have Ten Stamina and Five Styles.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Plant here repreſented is,

Lychnis, *caule erecto, calycibus ſtriatis acutis, petalis diſſectis.* Campion or Lychnis with an upright Stalk, a ſtriped acute-pointed Empalement, and the Petals of the Flower cut into Segments.

The Leaves of this Plant are oblong, narrow, and blunt-pointed, and come out in Cluſters, formed into ſeparate Heads, which ſit near the Ground; from the Center of which ariſes an upright Stalk about Nine Inches high, garniſhed with Leaves like thoſe below, but ſmaller and are more pointed; theſe are placed oppoſite. The upper Part of the Stalk branches out into ſmaller Footſtalks; ſome of theſe ſuſtain Two, and others but One Flower; theſe have Empalements, which are tubulous, and cut into Five acute Points at the Top, as is repreſented at *a*. They have ſeveral longitudinal Stripes running through them; the Flower is double, ſo has none of the Parts of Generation; but inſtead of theſe, a Multiplicity of Petals, as is repreſented at *b*. Theſe Petals are deeply cut into ſeveral Parts, as is ſhewn at *c* and *d*; they are of a bright purple Colour, and continue long in Beauty. This Plant was brought from *Portugal*; but from what Species of ſingle Lychnis this double one was produced is hard to determine, for we have not any one in the *Engliſh* Gardens which will agree with this. It is a perennial Root, and flowers at different Seaſons of the Year. I was favoured with this Plant by *John Browning*, Eſq; of *Lincoln's Inn*.

PLATE CLXXI.

Lycium, *Lin. Gen. Plant.* 232. *Jaſminoides*, *Niſſol. Act. R. Par.* 1711. *Rhamnus*, *C. B. P.* 477. Boxthorn.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Fifth Claſs of Plants, which includes thoſe Plants whoſe Flowers have Five Stamina and One Style. Theſe Plants have by ſome been ranged under the Genus of *Rhamnus*; but *Niſſol* of *Montpelier* conſtituted a Genus by the Title of *Jaſminoides*, under which he ranged them. But Doctor *Linnæus* has applied the Title of *Lycium* to this Genus, and has properly exhibited the Characters.

The Species here repreſented are,

Fig. 1. Lycium *foliis lineari longioribus, tubo florum longiori, ſegmentis obtuſis.* Boxthorn with longer narrower Leaves, and a longer Tube to the Flower, with obtuſe Segments. This is the *Lycium foliis linearibus*, *Hort. Cliff.* 57. Boxthorn with very narrow Leaves. *Boerhaave* titles it *Rhamnus afer ſpinis longis, cortice albo, fructu cæruleo, Ind. Alt.* 2. *p.* 212. *African* Rhamnus with long Spines, white Bark, and a blue Fruit. *Niſſol* calls it *Jaſminoides Africanum, Jaſmini aculeati foliis & facie, Act. Reg. Par.* 1711. Baſtard *African* Jaſmine with the Leaves and Appearance of prickly Jaſmine.

This Plant grows naturally at the *Cape of Good Hope*, and alſo in *Portugal*, from whence I have received the Seeds. It riſes with a ſhrubby irregular Stalk to the Height of Ten or Twelve Feet, ſending out ſeveral ligneous Branches, which have a white Bark, and are armed with long ſharp Thorns, upon which grow ſmall Cluſters of long narrow Leaves. Some of theſe Thorns put out One or Two ſmaller from their Side, which have Leaves ſet on them in the ſame Manner as the larger. The Flowers are produced from the Side of the Branches, ſtanding upon ſhort Footſtalks; they have a ſhort permanent Empalement of One Leaf, which is cut into Five acute Segments at the Top. The Flowers have a long Tube, which is cut into Five obtuſe Segments at the Brim, as is repreſented at *a*; and *b* ſhews One of the Flowers cut open longitudinally, which diſcovers the Situation of the Stamina, with their Summits; Three of which are left in their natural Poſition, and Two are taken out, as is repreſented at *c c*. The Germen at the Bottom of the Tube, with the Style ariſing from it, is ſhewn at *d d*. The Empalement, which incloſes the Germen, is repreſented at *e*; and the bifid Stigma upon the Top of the Style is ſhewn at *f*. The Germen afterward becomes a roundiſh Berry, marked *g*, which is cut tranſverſly at *h*, ſhewing the Poſition of the Seeds; and at *i* the outer Cover is taken off, whereby the Seeds are ſhewn lying round an oval Placenta. *k* repreſents the Seeds of their natural Size, and *l* One of them magnified. This Plant continues flowering moſt Part of Summer, and the Seeds ripen in Autumn.

Fig. 2. Lycium *foliis lineari-brevioribus, tubo florum breviori, ſegmentis ovalibus patentiſſimus.* Boxthorn with ſhorter narrow Leaves, a ſhorter Tube to the Flower, and the Segments at the Brim oval, and ſpread quite open.

This Sort was raiſed in the *Chelſea* Garden a few Years paſt, from Seeds which came from the *Cape of Good Hope*. It is of humbler Growth than the Firſt; the Leaves are ſhorter and a little broader; the Spines are garniſhed with Bunches of Leaves in the ſame Manner. The Flowers are ſmaller, have ſhorter Tubes, and their Brim cut deeper into oval Segments; the Fruit is alſo much ſmaller; but in other Reſpects they approach near to each other. This Sort flowers great Part of Summer, and the Fruit ripens in Autumn. All the Plants which have been raiſed from the Seeds of this do continue the ſame without any Alteration; and there is a Third Sort, with narrower Leaves, very near a-kin to theſe.

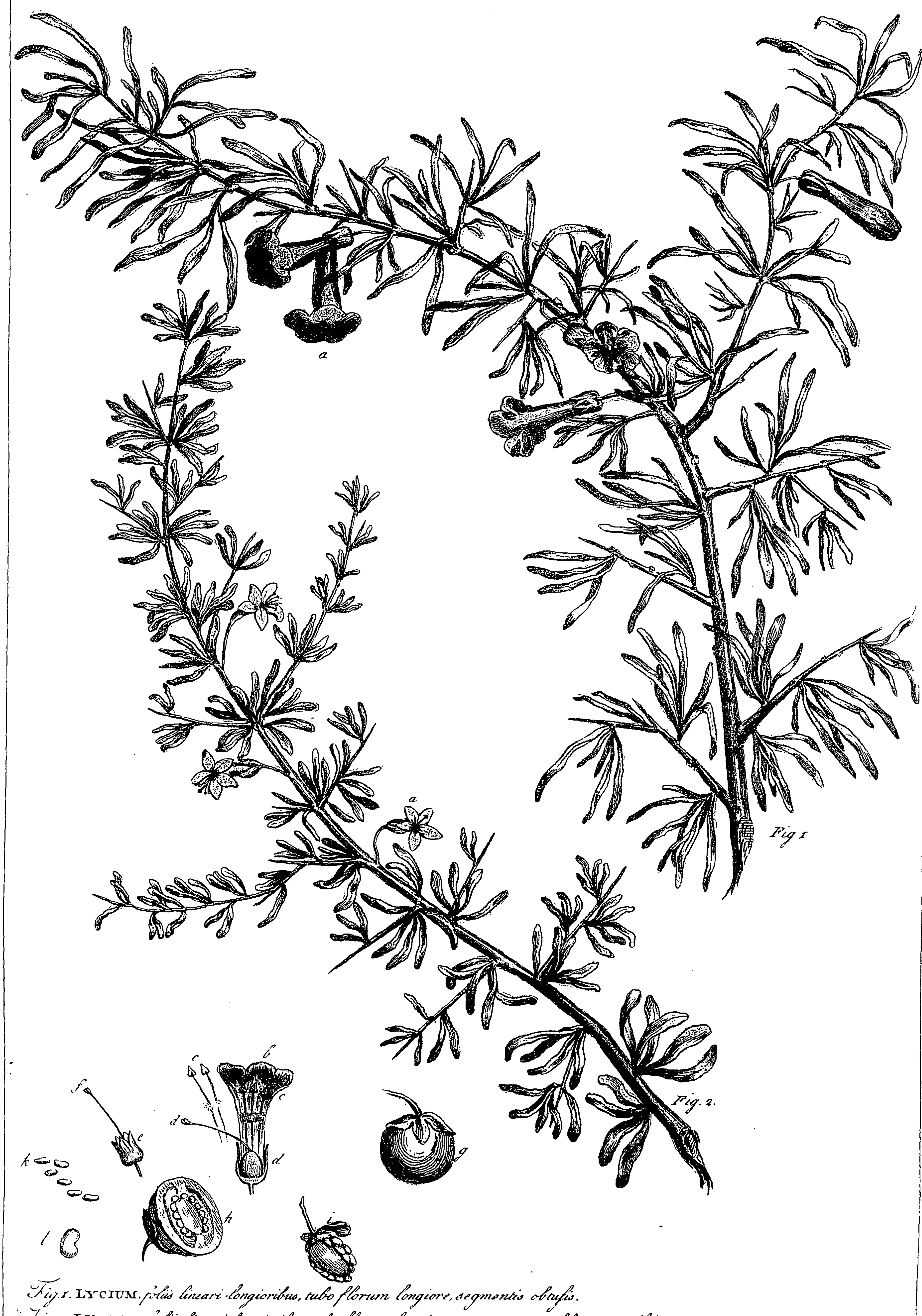
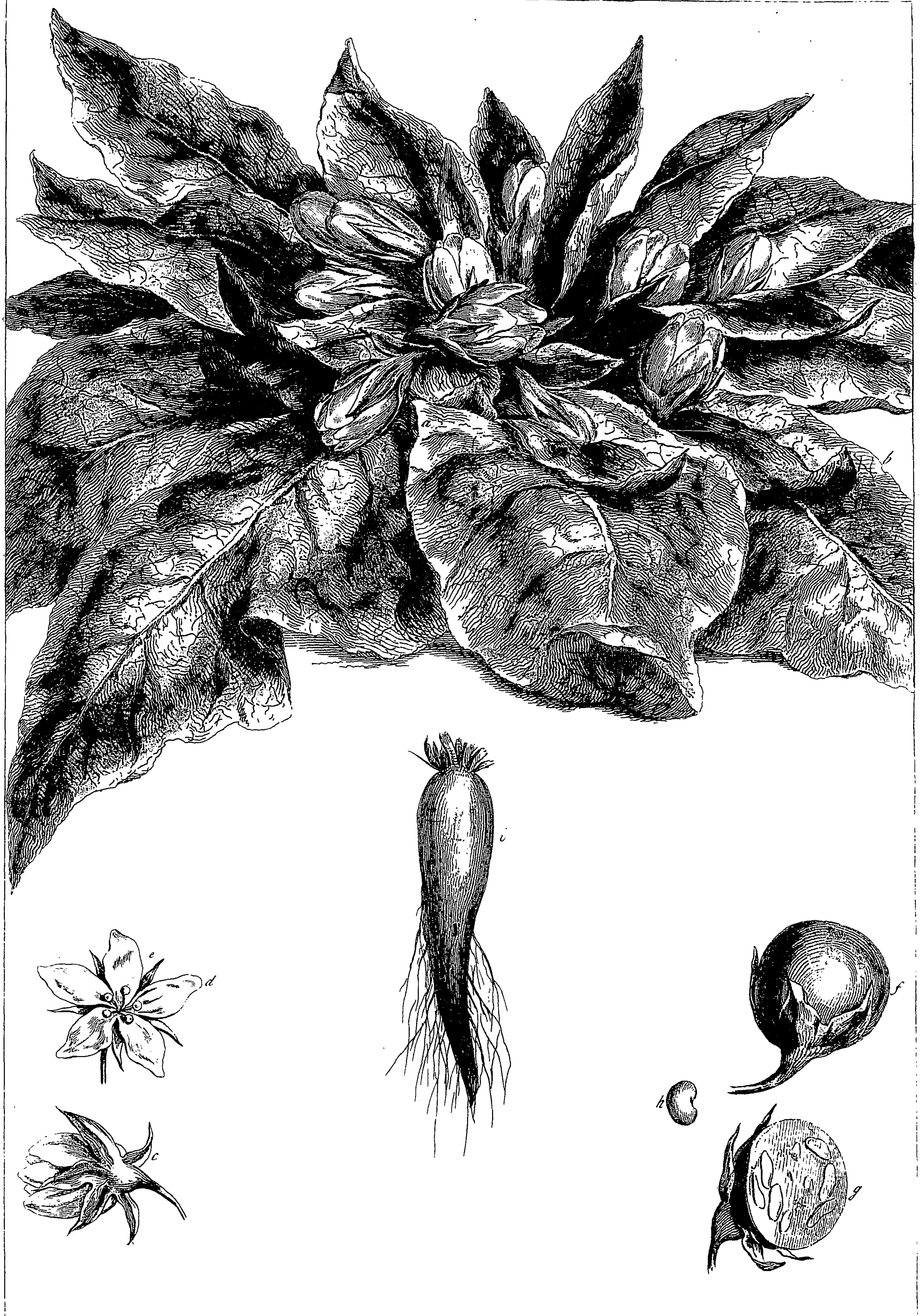


Fig. 1. LYCIUM, *foliis lineari-longioribus, tubo florum longiore, segmentis obtuſis.*

Fig. 2. LYCIUM, *foliis lineari-brevioribus, tubo florum breviore, segmentis ovalibus patentiſsimis.*

R. Lancake delin. *I. Miller Sculpt.*

Publish'd according to Act of Parliament by P. Miller July 28. 1757.



MANDRAGORA, *Lin. Hort. Cliff.* 57.

R. Lancake delin.

I Mynde Sculp

Publish'd according to Act of Parliament by P. Miller. July 28. 1757.

PLATE CLXXII.

Magnolia, *Plum. Nov. Gen.* 38. *Tab.* 7. *Hort. Elth.* 168. *Lin. Gen. Plant.* 610. The Laurel-leaved Tulip-tree.

THIS Genus of Plants is ranged in the Seventh Section of *Linnæus*'s Thirteenth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina and Styles.

The Characters of this Genus are exhibited in the *Gardeners Dictionary.*

The Species here repreſented is,

Magnolia *foliis lanceolatis perſiſtentibus, caule erecto arboreo.* Magnolia with evergreen Spear-ſhaped Leaves, and an upright Tree-ſtalk. This is the *Magnolia altiſſima, flore ingenti candido, Cateſb. Carol.* 2. *p.* 61. Talleſt Magnolia with a very white Flower.

This Tree grows naturally in *South Carolina* and *Georgia*, where it riſes with an upright Trunk to the Height of Seventy or Eighty Feet, dividing into many ſpreading Branches, ſo as to form a large Head. The Branches are garniſhed with large Spear-ſhaped Leaves, which are Nine or Ten Inches long, and Three Inches broad in the Middle; they are of a thick Conſiſtence, and a little waved on their Edges, ending in acute Points; and are placed without Order on every Side the Branches, to which they ſit cloſe, having no Footſtalks, as is repreſented at *a*. Theſe Leaves continue Green through the Year, and only fall off as the Branches extend in Length, and new Leaves are produced. The Flowers are produced at the End of the Branches; theſe are compoſed of Eight or Ten Petals, repreſented at *b*; which are narrow at their Baſe, but broad at their Extremity, where they are rounded and a little waved; they ſpread open very wide, and are of a fine white Colour. In the Center of the Flower are ſituated the numerous Stamina, with the ſeveral Styles, faſtened to One common Receptacle, as is repreſented at *c*. The Bud of the Flower, diveſted of its Empalement, is ſhewn at *d*, juſt before it expands, and *e* repreſents it with the Empalement; *f* is the ſame at its firſt Appearance, when included in the Empalement. *g* is a Part of the Empalement taken off from the Flower; *h* exhibits a View of the Germen with the Styles, which are recurved; *i* ſhews One of the Cells opened, with the Seed in its natural Poſition; *k* repreſents the ſame, with the Seed diſcharged, hanging out by a ſlender Filament as at *l*; *m* and *n* repreſent the Scales of the Fruit, *o* and *p* the Two Kernels of the Seeds, and *q* the whole Fruit with the ripe Seeds hanging out; which is repreſented ſmaller than Nature, to bear a Proportion to the Size of the Leaves and Flowers, which are too large to be contained of their natural Size in the Compaſs of this Plate. This Tree flowers with us in *July*, but in its native Country there is a Succeſſion of Flowers for Two or Three Months.

This Tree is one of the greateſt Ornaments to the Woods in its native Place of Growth; and if it can by Time be brought ſo hardy as to reſiſt the Cold of our Winters in *England*, will be the fineſt Ornament in the *Engliſh* Gardens; for its noble ever-green Leaves make a fine Appearance in every Seaſon of the Year; and when the Trees are covered with large Flowers in Summer, there is ſcarce any Tree of equal Beauty. There are at preſent ſeveral Trees in the *Engliſh* Gardens, which have for ſome Years paſt produced Flowers; the Firſt of theſe is in the Garden of Sir *John Colleton*, Bart. in *Devonſhire*; there is another in the Garden of Mr. *Chriſtopher Gray*, Nurſery-man, near *Fulham*; and there was One a few Years ſince in the Garden of Sir *Charles Wager*, at *Parſons Green*, which flowered ſeveral Years: But there are ſome of theſe Trees in the Garden of his Grace the Duke of *Richmond* at *Goodwood*, in *Suſſex*, which thrive better than any I have yet ſeen, and have produced Flowers ſome Years. But our Seaſons are not warm enough to bring the Fruit to Maturity; ſo that we can never hope to ſee the Trees adorned with them, which is a great Beauty to them in their native Soil.

PLATE CLXXIII.

Mandragora, *Tourn. Inſt. R. H.* 76. *Tab.* 12. *Raii Meth.* 74. *Lin. Gen. Plant.* 221. Mandrake, in *French*, *Mandragore.*

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Firſt Claſs, which includes the Herbs with a Bell-ſhaped Flower of One Leaf, whoſe Pointal turns to a ſoft thick Fruit. Mr. *Ray* places it in his Seventeenth Claſs, which contains thoſe Plants which bear Berries, and are thinly placed. Doctor *Linnæus* ranges it in the Firſt Section of his Fifth Claſs, in which thoſe Plants are contained whoſe Flowers have Five Stamina and One Style,

The Species here repreſented are,

Mandragora, *Hort. Cliff.* 57. Mandrake. This is the *Mandragora fructu rotundo, C. B. P.* 169. Mandrake with a round Fruit. *John Bauhin* titles it, *Mandragora mâs, Hiſt.* 3. 617. Male Mandrake.

There are ſome other Varieties of this Plant enumerated in Books, but I have not as yet ſeen any other than is here repreſented. Doctor *Linnæus* ſuppoſes them to be but One Species, and herein I believe he is right; for the Diſtinctions which are made are chiefly in the Colour of their Flower or Fruit, and the Size of their Leaves, which may be only accidental; that Sort, with pale blue Flowers, is titled, *Mandragora fœmina*, by *John Bauhin*; but for what Reaſon I cannot ſay, for both theſe produce Fruit equally.

This Plant grows naturally in *Spain*, *Italy*, and the Iſlands of the *Archipelago*. It hath a thick, fleſhy, taper Root, which runs deep in the Ground, ſending out a great Cluſter of long, rough, green Leaves, which at firſt ſtand erect, but after a little Time ſpread near the Ground, as is repreſented at *b*. In the Middle of theſe come out ſeveral Bell-ſhaped Flowers, cut into Five Parts, as is repreſented at *a*; theſe riſe each with a long Footſtalk immediately from the Crown of the Root; they have an Empalement which it deeply divided into

Five

Five Segments, as is ſhewn at *c*. The Petal of the Flower is alſo cut into Five Parts, as at *d*; and in the Center are Five Stamina, repreſented at *e*, ſituated at the Baſe of the Petal. At the Bottom is ſituated a round Germen, which afterward turns to a large, round, fleſhy Fruit, ſitting in the Empalement of the Flower, as is repreſented at *f*; this is firſt green, but when ripe changes to a yellowiſh Colour. *g* ſhews One of the Fruit cut tranſverſly, wherein the Seeds are repreſented in their natural Poſition; and *h* ſhews One of the Kidney-ſhaped Seeds taken out of the Fruit. This Plant flowers the Beginning of *April*, and the Seeds ripen in *July*.

The Roots of theſe Plants are of long Duration: I have known ſome of them above Fifty Years, which were ſeveral Years old before I was acquainted with them, and theſe are yet very vigorous. I have traced Two or Three of theſe Roots which were more than Four Feet deep in the Ground, and of a conſiderable Thickneſs: That which is repreſented in this Plate is but of few Years Growth; however, it ſhews the Form of the Root, which ſeldom varies otherwiſe than by dividing ſometimes into Two or Three ſmall Roots below; ſo has no Reſemblance of the human Shape as has been reported. For thoſe Roots, which have been ſhewn as ſuch by cunning Impoſtors, were of the white Briony. Theſe have been brought to that Shape by fixing ſuch Molds as are uſed by the Image-makers to young Roots of Briony, faſtening them well together; and as the Roots increaſe in Size, ſo they are compreſſed by the Mold into the Form deſigned: And are then taken up, and carried about by Mountebanks, to impoſe on the credulous.

PLATE CLXXIV.

MEADIA, *Cateſb. Carol. App.* 2. *Tab.* 1. *Dodecatheon, Lin. Gen. Plant.* 183.

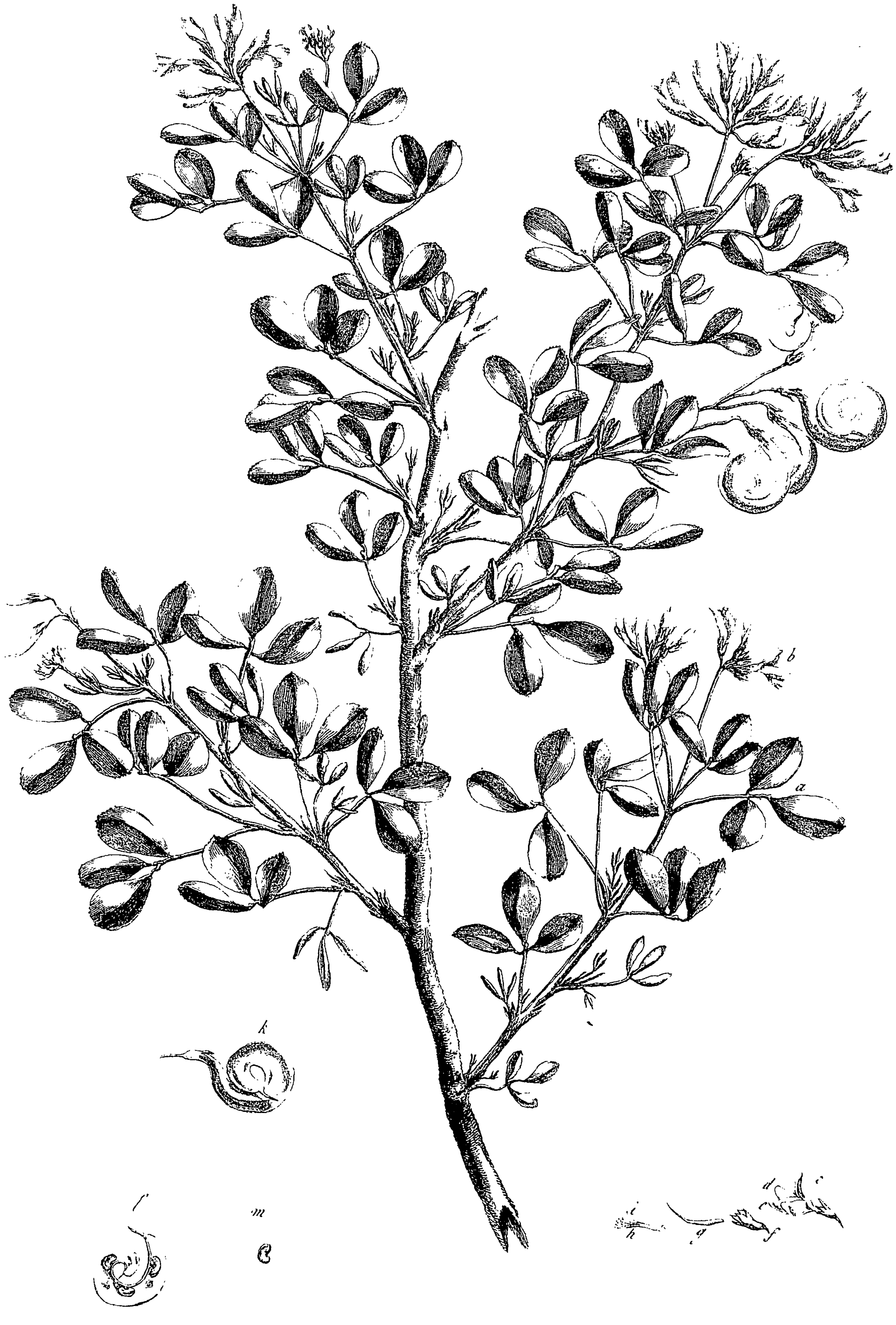
THIS Genus is ranged in the Firſt Section of *Linnæus*'s Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and One Style. It had the Title of *Meadia* applied to it by Mr. *Mark Cateſby*, F. R. S. in Honour of Doctor *Mead*, who was a generous Encourager of every uſeful Branch of Science; but, being himſelf no great Botaniſt, Doctor *Linnæus* would not allow any Plant to bear his Name, ſo has changed it to that of *Dodecatheon*; which is a Title applied by *Pliny* to a Species of Primroſe with a yellow Root, and Leaves like Garden Lettuce.

We know but One Species of this Genus; *viz.*

MEADIA, *Cateſb. Hiſt. Carol. App.* 1. *Tab.* 1. Meadia. This is titled by Doctor *Plukenet*, *Auricula Urſi Virginiana, floribus boraginis inſtar roſtratis, Cyclaminum more reflexis, Alm.* 62. *Tab.* 79. *f.* 6. Bears-ear of *Virginia*, with a Flower having a Beak like Borage, and are reflexed like the Cyclamen or Sowbread.

It hath a perennial Root, which puts out ſeveral long, ſmooth, green Leaves in the Spring, as are repreſented at *a*. From between theſe ariſe One, Two, Three, or Four upright Stalks, in Proportion to the Size of the Root; theſe riſe Eight or Nine Inches high, are naked, ſmooth, and terminated by a Cluſter of Flowers, each having a pretty long ſlender Footſtalk, which are recurved, ſo that the Flowers hang downward. The Flower has One Petal, which is deeply cut into Five Parts, and reflexed quite backward, as is repreſented at *b*; they are of a purple Colour, and at the Bottom are ſituated the Five Stamina and Style, which coaleſce at their Point, and form a Sort of Beak, as is repreſented at *c*; and are incloſed in a ſort of Sheath, which is ſhewn at *d*; and *e* repreſents the Stamina taken out of the Flower. At the Bottom of the Flower is ſituated an oblong Germen, which afterward becomes an oval Pod ſitting in the Empalement of the Flower, with the permanent Style at the Top, repreſented at *f*; and *g* ſhews the Capſule with its Top taken off; *h* the ſame cut tranſverſly, and *i* the Veſſel cut longitudinally, ſhewing the ſmall Seeds faſtened round the oval Placenta.

This Plant grows naturally in *Virginia*, and other Parts of *North America*, from whence it was ſent by Mr. *Baniſter*, many Years ſince, to Dr. *Compton*, Biſhop of *London*, in whoſe curious Garden I firſt ſaw this Plant growing, which was in the Year 1709; but of late Years it hath been propagated in greater Plenty in *England*. It flowers in *April*, and the Seeds ripen in *July*.



MEDICAGO, *leguminibus lunatis margine integerrimis, caule arboreo Hort. Cliff.* 376.

J. Miller del. et Sculp

Publish'd according to Act of Parliament by P. Miller August 30. 1757.

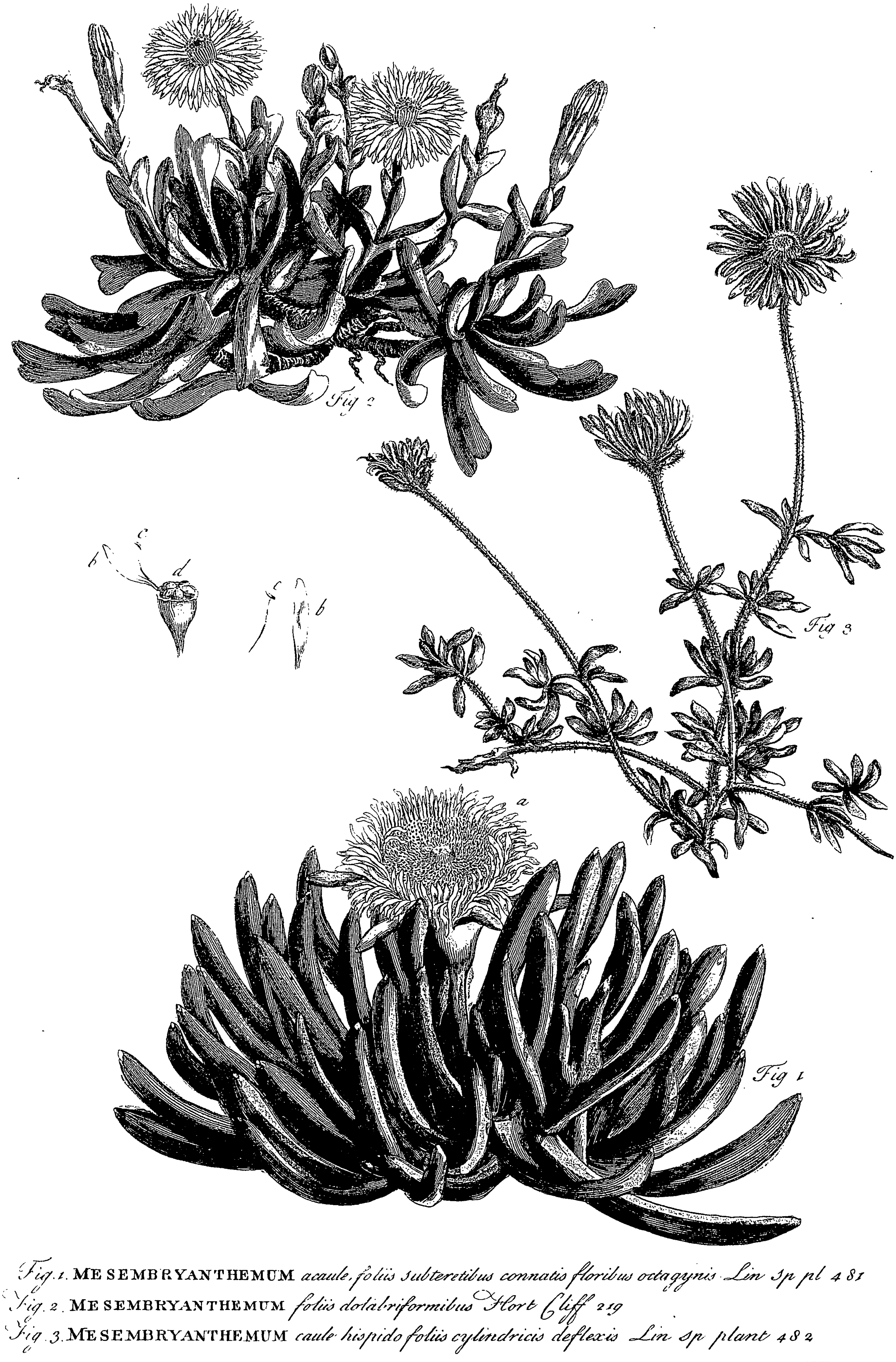


Fig. 1. **MESEMBRYANTHEMUM** *acaule, foliis subteretibus connatis floribus octagynis Lin Sp pl 481*
Fig. 2. **MESEMBRYANTHEMUM** *foliis dolabriformibus Hort Cliff 219*
Fig. 3. **MESEMBRYANTHEMUM** *caule hispido foliis cylindricis deflexis Lin Sp plant 482*

G. Ehret del *J. Miller Sculp*

Publish'd according to Act of Parliament by P. Miller August 29 1757

PLATE CLXXV.

Medicago, *Tourn. Inſt. R. H.* 412. *Tab.* 213. *Lin. Gen. Plant.* 805. *Raii Meth. Plant.* 108. Moon-trefoil, or *Cytiſus* of *Virgil.*

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Tenth Claſs, which includes the Plants with a Butterfly Flower, whoſe Leaves are trifoliate. Doctor *Linnæus* places it in the Third Section of his Seventeenth Claſs, which contains thoſe Plants which have Butterfly Flowers with Ten Stamina, Nine of which are joined together, and One ſtands ſeparate. Mr. *Ray* ranges it in the Second Section of his Twenty-firſt Claſs, which includes the leguminous Plants with Three Leaves.

The Characters of this Genus are exhibited in the *Gardeners Dictionary.*

The Species here repreſented is,

Medicago *leguminibus lunatis margine integerrimis caule arboreo, Hort. Cliff.* 376. Moon-trefoil, with Moon-ſhaped Pods, whoſe Borders are intire, and a Tree-like Stalk. This is the *Cytiſus incanus, ſiliquis falcatis, C. B. P.* 389. Hoary Cytiſus, with Sickle-ſhaped Pods. *John Baubin* titles it *Cytiſus ſiliquâ incurvâ folio candicante, Hiſp.* 1. 361. Cytiſus with incurved Pods, and a white Leaf.

This Plant grows naturally in *Abruzzo*; and alſo in the Iſlands of the *Archipelago*, where the Cattle browſe on the Branches; and the Stems are uſed by the *Turks* for Handles to their Scymitars. It riſes with a woody Stem Four or Five Feet high, ſending out many ligneous Branches on every Side, ſo as to form a large buſhy Head, where Cattle are not permitted to feed on it. Theſe Branches are garniſhed with trifoliate Leaves, repreſented at *a*, which ſtand on pretty long Footſtalks, and are of a deep Green on their upper Side, but are hoary on their under Side; theſe contract themſelves every Evening, and, in cold Weather, turning their under Side outward; the Flowers are produced in Cluſters at the End of the Branches, as is ſhewn at *b*, ſtanding upon pretty long Footſtalks, each ſuſtaining Four or Five Flowers of a deep yellow Colour; they are of the Butterfly Kind, having an oval intire Standard, marked *c*, whoſe Edges are inflexed; but the whole is reflexed, with Two oval Wings marked *d*, which are cloſely ſhut together, and a Keel marked *e*, which is oblong, bifid, and inflexed: Theſe Flowers have Nine Stamina, which are joined, as is repreſented at *h*; and the other ſeparates from them at the Top, as is ſhewn at *i*. The Style is ſhut up in the Standard, where it is twiſted, but is repreſented ſtraiter at *g*, in the Manner it extends when taken out. The Germen is ſituated in a tubulous Empalement, repreſented at *f*, which is cut at the Top into Five acute Segments. The Germen afterwards turns to a compreſſed Sickle-ſhaped Pod, marked *k*, in which are Three or Four Kidney-ſhaped Seeds, as is ſhewn at *l*, where the Pod is ſplit open to repreſent how the Seeds are lodged; and *m* ſhews a ſingle Seed taken out of the Pod.

This Plant begins to produce its Flowers in *April*, and continues a Succeſſion of them till the hard Froſt puts a Stop to them; ſo that, in a moderate Climate, it will continue flowering all the Year. The Flowers are ſucceeded by compreſſed incurved Pods, which ripen in Succeſſion, as they are produced all the Summer. The Plants are propagated by Cuttings or Slips; theſe, when young, are frequently deſtroyed by Froſt; but when they have acquired Strength, they will live through the Winter in the open Air, provided they are in a dry Soil, and a ſheltered Situation.

If the Tops of the Shoots are bruiſed between the Fingers, they emit a ſtrong Odour, ſomewhat like the *Rocket*; but they have a ſweet leguminous Taſte like the Tops of *Peaſe*, ſo are certainly a good Feed for moſt Sorts of Cattle in thoſe Countries where it naturally grows; but it is too tender for that Purpoſe in *England.*

PLATE CLXXVI.

Mesembryanthemum, *Dill. Gen. Plant.* 9. *Lin. Gen. Plant.* 552. *Ficoides, Herm. Tourn. Act. R. Scien.* 1705. *Raii. App.* 193. Fig Marygold.

THIS Genus of Plants is ranged in the Fourth Section of *Linnæus*'s Twelfth Claſs, which includes thoſe Plants whoſe Flowers have about Twenty Stamina and Five Styles. *Tournefort* and *Ray* range this with the Plants whoſe Flowers are ſucceeded by ſeveral Capſules. Doctor *Herman* gave the Title of *Ficoides* to this Genus, from the Similitude between the Fruit of this Plant and the Fig; in which he was followed by *Tournefort*, *Ray*, and *Boerhaave*: But Doctor *Dillenius* gave the Characters of this Genus, in the Appendix to his Catalogue of Plants which grow naturally about *Giſſam* in *Germany*, under this Title of *Meſembryanthemum*, which has been adopted by moſt of the late Writers on Botany.

The Characters are exhibited in the *Gardeners Dictionary.*

The Species here repreſented are,

Fig. 1. Mesembryanthemum *acaule, foliis ſubteretibus connatis, floribus octagynis, Lin. Sp. Plant.* 481. Meſembryanthemum without a Stalk, taper Leaves joined at their Baſe, and Flowers with Eight Styles. This is the *Ficoides Capenſis humilis, cepææ folio, flore ſtramineo, Brad. Succ.* 2. p. 10. f. 19. Dwarf Cape Fig Marygold, with an Onion-Leaf and a Straw-coloured Flower. This is titled by Doctor *Dillenius*, *Meſembryanthemum folio calamiforme, Hort. Elth.* 239. Meſembryanthemum with a Quill-ſhaped Leaf.

This Plant grows naturally at the *Cape of Good Hope* among the Rocks and Sand, from whence it was brought to *Holland*, where it was cultivated; and in the Year 1718 was brought to *England*. This Plant never riſes with a Stalk, the Leaves growing always cloſe to the Ground; theſe are about Three Inches long, taper, excepting on the upper Side, where, toward their Baſe, they are little flatted. They are of a dark Green, and full of Moiſture, ſtanding by Pairs, with their Baſe joined, ſo that the Stalk ſeems to perforate them. The Flowers ſtand upon ſhort thick ſucculent Footſtalks, which do not riſe above the Leaves, ſupporting one large Straw-coloured Flower at the Top, with pale purpliſh Rays or Borders, marked *a*. Theſe Flowers appear at different Times of the Year, ſo are not conſtant to any Seaſon; and ſometimes the Seeds ripen in warm Seaſons.

Fig. 2. Mesembryanthemum *foliis dolabriformibus, Hort. Cliff.* 219. Meſembryanthemum with an Axe-ſhaped Leaf. This is the *Ficoides Afra, folio triangulari, ſecuris forma, flore aureo ſtellato, Boerh. Ind. alt. Sp.* 290. *African* Fig Marygold, with a triangular Hatchet-ſhaped Leaf, and a ſtarry Gold-coloured Flower. *Bradley*, in his Decades of ſucculent Plants, titles it *Ficoides Capenſis humilis, foliis cornua cervi referentibus petalis luteis, noctiflora, Dec. Sp.* 11. Dwarf Cape Fig Marygold with Leaves like Stag's Horns, and yellow Petals, which expand at Night.

This Sort hath ligneous Stalks, which riſe Three or Four Inches high, and divide into ſeveral ſhort Branches, which are garniſhed with ſucculent Leaves, that are thick on their upper Edge, having Two obtuſe Angles; and the lower Edge is thinner; the Ends of the Leaves are blunt, and ſome of them are ſhaped like an Axe; they are of a pale green Colour, and embrace the Stalks with their Baſe. The Flowers are produced on ſhort Footſtalks at the End of the Branches; they are of a deep yellow Colour, and never open till the Sun is near ſetting; it flowers in *June* and *July*.

Fig. 3. Mesembryanthemum *caule hiſpido, foliis cylindricis deflexis, Lin. Sp. Plant.* 482. Meſembryanthemum with a rough hairy Stalk, and cylindrical deflexed Leaves. This is the *Ficoides Afra fruticoſa, caule lanugine argentea ornato, folio tereti parvo longo, guttis argenteis quaſi ſcabro, flore violaceo, Boerh. Ind. alt. Sp.* 291. Shrubby *African* Fig Marygold with Stalks covered with ſilvery Wool, and a ſmall long taper Leaf with ſilvery rough Drops, and a Violet-coloured Flower.

This Plant hath trailing ſlender ſhrubby Stalks, which are ligneous, and covered with ſtiff prickly Hairs. The Leaves come out in Cluſters at the Joints; theſe are cylindrical and deflexed. The Flowers are produced on long naked hairy Footſtalks at the Ends of the Branches; they are compoſed of many purple Petals, ſet round the Margin like Rays, which are oblong and blunt, as is repreſented at *b b*; the Diſk or Middle is filled with ſlender Stamina, marked *c c*, having ſhort proſtrate Summits after the Flower is paſt; the Germen ſwells to an oblong Fruit, having Five Cells marked *d*, which are filled with ſmall roundiſh Seeds. This Plant flowers in *May* and *June*, and frequently perfects Seeds in the Autumn.

PLATE CLXXVII.

Fig. 1. Mesembryanthemum *foliis ſubtriquetris ſcabris, corollis bicoloribus Lin. Sp. Plant.* 485. Meſembryanthemum with rough three-cornered Leaves, and the Petals of the Flower of Two Colours.

THIS is the *Ficoides, ſeu Ficus Africana, folio longo tenui, flore aurantio.* It hath ſlender ligneous Stalks, which riſe Two Feet high, ſending out many Branches, which are garniſhed with long ſlender three-cornered ſucculent Leaves of a light green Colour, which are placed by Pairs, embracing the Stalks with their Baſe. From the Boſom of theſe are produced Cluſters of ſmaller Leaves of the ſame Form; and from the Wings of the Stalk are produced ſmaller Branches, which are garniſhed with the like Leaves. The Ends of the Stalks are terminated by Flowers, which are radiated like the other Species, and are pretty large. The Petals are long and narrow, of a Gold Colour below, but are tipped with Purple, as is repreſented at *a* and *b*; they are broader at their Baſe than their Points, as is ſhewn at *c*, which is One of the Petals ſeparated from the Flower. In the Center are ſituated a great Number of ſlender Stamina, which are terminated by blunt Summits, as is repreſented at *d*. Under the Flower is ſituated an oblong Germen, which afterwards becomes a fleſhy ſucculent Capſule, marked *e*, having Five Cells, as is ſhewn at *f*, which are filled with ſmall Seeds. This Plant flowers at different Seaſons; but the moſt uſual Time of its flowering is the latter End of *May*, and in *June*; and theſe are often ſucceeded by Fruit which ripen their Seeds in the Autumn, when the Seaſons are favourable. The Plants do alſo flower again in Autumn.

Fig. 2. Mesembryanthemum *ſubacaule, foliis ciliato-dentatis, Hort. Cliff.* 218. Meſembryanthemum with ſcarce any Stalk, and Leaves indented, ending with an Hair. This is the *Meſembryanthemum rictum caninum referens, Hort. Elth.* 241. commonly called *Dog's-chap Ficoides. Bradley*, in his Decades of ſucculent Plants, titles it *Ficoides Capenſis humilis, folio triangulari prope ſummitatem dentato, flore luteo, Dec.* 2. p. 8. Dwarf Cape Fig Marygold with a triangular Leaf indented toward the End, and a yellow Flower. Doctor *Linnæus* ſuppoſes this, and what is called the *Cat's-chap Ficoides*, to be only Varieties; but whoever ſees both Plants, cannot doubt of their being diſtinct Species.

This hath very thick ſucculent Leaves of a grey Colour, which are triangular at their Ends, but their lower Part is convex and rounding. Their upper Side is flatted, and towards their Ends is indented on their Edges like Teeth, marked *b*. The Ends of the Leaves are blunt, and rounded inward, as at *a*; theſe grow cloſe to the Ground, having no Footſtalks, and from the Root divide into ſeparate Heads. The Flowers riſe upon naked Footſtalks from the Center of the Heads; they grow about Five Inches high, ſupporting one large yellow Flower, like thoſe of the other Species: They appear at different Seaſons of the Year.

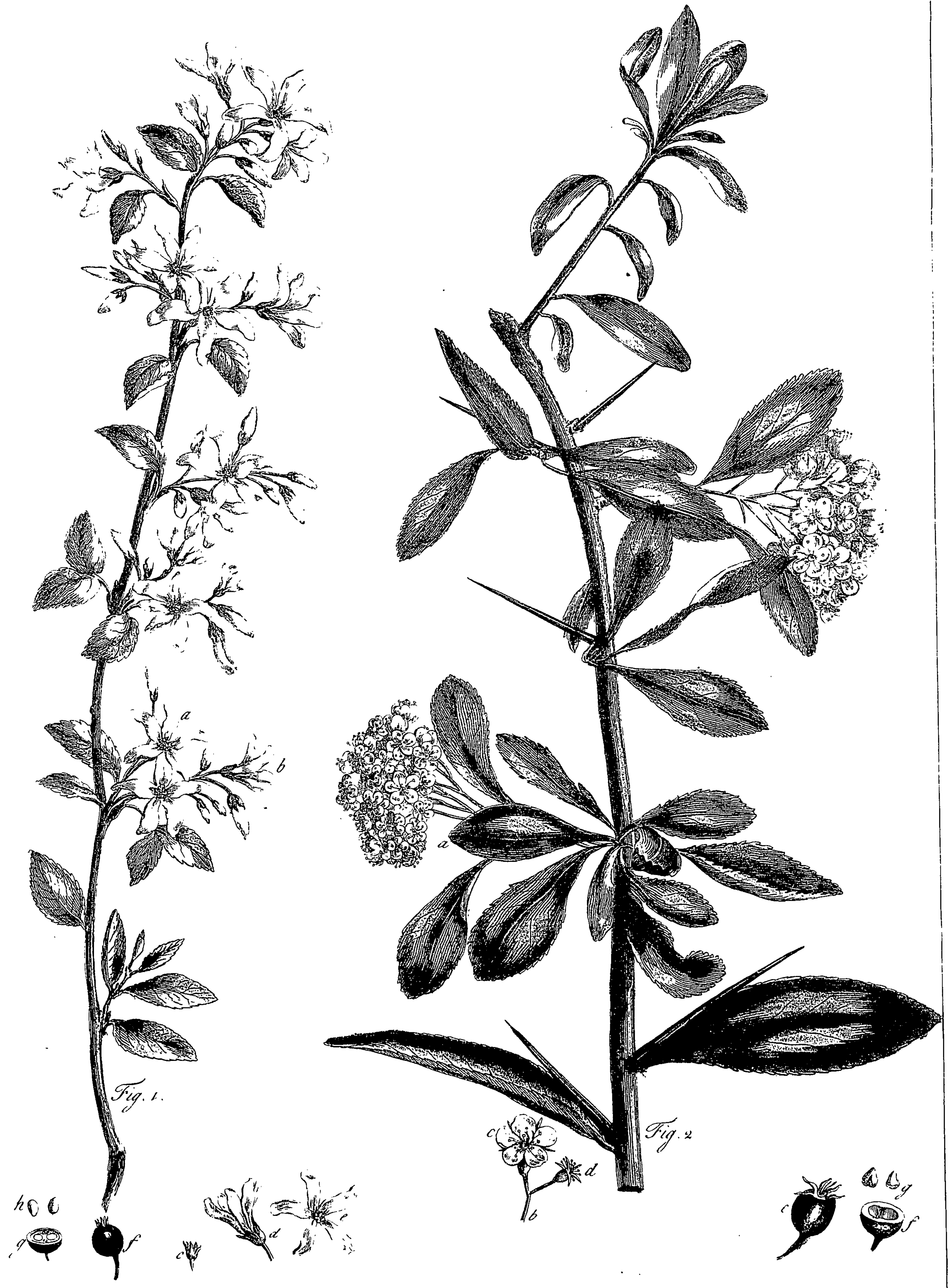


Fig. 1. **MESPILUS**, *inermis, foliis ovalibus ſerratis, cauliculis hirſutis Lin. Sp. plant.* 478.

Fig. 2. **MESPILUS**, *foliis lanceolatis ſerratis, ſpinis robustioribus, floribus corymboſis.*

R. Lancake delin. J. Miller Sculp.

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PLATE CLXXVIII.

Mespilus, *Tourn. Inſt. R. H.* 641. *Tab.* 410. *Raii Meth. Plant.* 143. *Lin. Gen. Plant.* 549. *The* Medlar *or* Hawthorn.

THIS Genus of Plants is ranged in the Ninth Section of *Tournefort*'s Twenty-firſt Claſs, which includes the Trees and Shrubs with a Roſe Flower, whoſe Empalement becomes a Fruit with hard Seeds. Mr. *Ray* places it in the *Appendix* to his *Method*, with the Trees that produce umbilicated Fruit with ſeveral Seeds. Doctor *Linnæus* ranges it in the Fourth Section of his Twelfth Claſs, which includes thoſe Plants whoſe Flowers have about Twenty Stamina and Five Styles, and ſeparates thoſe which have only Two Styles to his Genus *Cratægus*; thoſe with Three under *Sorbus*; and thoſe with Five under *Meſpilus*. But theſe Diſtinctions are not permanent, ſo muſt not be followed; for the Number of Stamina and Styles differs in the Flowers of the ſame Tree.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Plants here repreſented are,

Fig. 1. Mespilus *inermis, foliis ovalibus ſerratis, caliculis hirſutis, Lin. Sp. Plant.* 478. Medlar without Spines, oval ſawed Leaves, and hairy Stalks. This is the *Meſpilus folio rotundiori, fructu nigro ſubdulci, Tourn. Inſt.* 642. Medlar with a rounder Leaf, and a black ſweetiſh Fruit. *Caſpar Bauhin* titles it *Alni effigie, lanato folio minor, Pin.* 452. The *Amelanchier*, by ſome called *New England Quince*.

This Plant grows naturally in *France* and *Germany*, where is riſes with a ſhrubby Stalk Five or Six Feet high, with a ſmooth purpliſh Bark, which in the young Shoots is covered with a hairy Down; theſe are garniſhed with oval Leaves, which have a thick white Down over their under Side, but are ſmooth above, and ſlightly ſawed on their Edges. The Flowers are produced from the Side of the Stalk, in looſe Spikes at every Joint; theſe are compoſed of Six narrow white Petals as is repreſented at *a*, where the Front of the Flower is exhibited to Veiw; and *b* ſhews the back Part of the Flower. Theſe have an Empalement of One Leaf, which is tubulous, and cut into Six Segments at the Top, as is repreſented at *c* and *d*; *e* repreſents One of the Flowers taken from the Spike, which has but Five Petals, for they are not conſtant in their Number. In the Center are ſituated the Stamina, with their Summits, which are not longer than the Tube of the Flower theſe immediately ſurround the Styles which ariſe from the Germen, ſituated under the Flower, and, after the Flower is paſt, turn to an umbilicated Fruit repreſented at *f*; this turns black when ripe, and is divided into Two Cells, as is ſhewn at *g*, where the Fruit is cut horizontally, to ſhew the Two hard Seeds marked *h*, as they lie in the Fruit.

This Shrub flowers in *May*, and makes a fine Appearance in the Garden when intermixed with other Shrubs of the ſame Growth; the Fruit ripens in *September*, but the Birds often get theſe as ſoon as they ripen.

There is another Sort of this which came from *America*, and has been ſuppoſed to be the ſame with this; but the Leaves are of a different Shape, being narrow at their Baſe, but broad and round at their Extremities; theſe are almoſt intire and ſmooth on both Sides, ſtanding upon ſlender Footſtalks; ſo that it is undoubtedly a diſtinct Species from this.

Fig. 2. Mespilus *foliis lanceolatis ſerratis, ſpinis robuſtioribus, floribus corymboſis.* Medlar with Spear-ſhaped ſawed Leaves, very ſtrong Spines, and Flowers growing in a Corymbus. This I ſuppoſe to be the *Meſpilus Pruni foliis, ſpinis longiſſimis fortibus, fructu rubro magno, Clayt. Flor. Virg.* 55.

This Sort grows naturally in *North America*; the Fruit of it was ſent me from *Philadelphia*. It riſes with a ſtrong Stem to the Height of Ten or Twelve Feet; the Bark of the Stem is rough when it becomes large, but that of the Branches is ſmooth, and of a reddiſh Colour. The Branches ſpread flat, and intermix with each other very irregularly; theſe are garniſhed with Spear-ſhaped Leaves about Three Inches long, and One broad in the Middle; they are ſawed on their Edges, and are of a lucid Green, placed alternately on the Branches; but at many of the Joints there are ſmaller Leaves, which come out in Cluſters; and under the Leaves come out very ſtrong Thorns, which are Two Inches long, and very ſtrong; ſo that a Hedge planted with this Sort of Trees would be one of the ſecureſt Fences for Incloſures. The Flowers are produced from the Wings of the Stalk in roundiſh Bunches, as is repreſented at *a*; theſe are compoſed of Five roundiſh Petals marked *c*, which are white, with a Bluſh of Red. There are generally Two Flowers upon each Footſtalk, as is repreſented at *b*. The Flowers have Ten Stamina in each, which are terminated by roundiſh Summits of a bright red Colour; theſe ſpread open in the ſame Manner as the Petals, and between them ariſe Three Styles, repreſented at *d*; theſe ſtand upon the globular Germen, which is ſituated below the Flower, and afterwards turns to a globular umbilicated Fruit of a fine red Colour, as is ſhewn at *e*, which is cut horizontally at *f*, to ſhew the Seeds *g*, which are hard, and but Two in each Fruit.

This Sort flowers in *June*, at which Time it makes a fine Appearance, as it alſo does in the Autumn when the Fruit is ripe, ſo is worthy of a Place in every Garden where there is Room for a Plantation of Trees and Shrubs.

PLATE CLXXIX.

Mespilus *foliis cordato-ovatis acuminatis, acute ſerratis, ramis ſpinoſis.* Medlar *or* Hawthorn, with oval Heart-ſhaped pointed Leaves, which are ſharply ſawed on their Edges, and Thorns on the Branches.

THIS Sort was raiſed from Seeds in the *Chelſea* Garden in 1738, which came from *North America*, by the Title of *New Haw*. As all the Plants which came from the Fruit of thoſe were the ſame, without Variation, we may put it down as a new Species.

It riſes with a ſtrong woody Stem about Four Feet high, ſending out many ſpreading Branches, which incline to a horizontal Poſition; theſe are garniſhed with Leaves differing in their Form; ſome are indented at the Footſtalk, like Heart-ſhaped Leaves, but others are not; they are about One Inch and a half long, and nearly of the ſame Breadth in the Middle, ending in acute Points, and their Borders are cut into ſeveral acute Parts, which are ſharply ſawed; they are of a bright Green, and ſtand on very ſlender Footſtalks, which are about One Inch long; the Branches are armed with a few pretty long ſlender Spines; the Flowers come out in ſmall Bunches from the Side of the Branches, and are compoſed of Five roundiſh Petals, which ſpread open, as is repreſented at *a*; theſe have Eight Stamina which ſpread on the Petals, as is ſhewn at *b*; and in the Middle of the Flower ariſe Four Styles, as is repreſented at *e*, which riſe from the Germen, as is ſhewn at *c*, where only One of the Styles is left, that the Germen may be ſeen. The Empalement of the Flower is cut into Five Segments at the Top, as is ſhewn at *d*. After the Flower is paſt, the Germen becomes a round umbilicated Fruit, repreſented at *f*, which is cut through horizontally at *g*, in which are contained Two hard Seeds, marked *h*. This Sort flowers the latter End of *June*, and the Fruit ripens in the Autumn.

PLATE CLXXX.

Jasminum, *Tourn. Inſt. R. H.* 597. *Tab.* 368. *Raii Meth. Plant.* 154. *Lin. Gen. Plant.* 17. Jaſmine.

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Twentieth Claſs, which includes the Trees and Shrubs with a Flower of One Leaf, whoſe Pointal becomes a ſoft Fruit, incloſing hard Seeds. Mr. *Ray* places it among the Trees which have Berries incloſing Two Seeds. Doctor *Linnæus* ranges it in the Firſt Section of his Second Claſs, which includes thoſe Plants whoſe Flowers have Two Stamina and One Style, and ſeparates many of the Species which have been ranged under this Genus to a new one, which he has conſtituted with the Title of *Nyctanthes*.

The Species here repreſented is,

Jasminum *foliis lanceolatis oppoſitis integerrimis, calycibus acutis.* Jaſmine with intire Spear-ſhaped Leaves placed oppoſite, and an acute Empalement.

This Plant was brought from the *Cape of Good Hope* by Captain *Hutchenſon*, who diſcovered it growing naturally a few Miles up the Land from the Sea, being drawn to it by the great Fragrancy of the Flowers, which he ſmelt at ſome Diſtance from the Plant, which was then in full Flower; ſo he cauſed it to be taken up and planted in a Tub of Earth, and carried on board his Ship, and brought it to *England*, where it has flowered Three Years in the curious Garden of *Richard Warner*, Eſq; at *Woodford*, in *Eſſex*, who was ſo obliging as to favour me with Branches of this curious Plant, with Flowers, to make the Drawing. It is a Plant unknown to the Botaniſts, having never been deſcribed in any of their Books; nor was the Plant known to the Perſon who has the Care of the *Dutch* Garden at the *Cape of Good Hope*, though it was found growing but a few Miles from it. This Plant approaches near to the *Nandi Ervatum major* of the *Malabar* Garden, but differs from it in the Shape of the Leaves, and alſo in having but One Flower upon each Footſtalk; nor is there any other of the *Jaſmines* which comes ſo near this Plant.

The Stem of this Plant is very large and woody, ſending out ſeveral ſtrong ligneous Branches, which are firſt green, but afterward have a ſmooth Aſh-coloured Bark; theſe come out oppoſite, and have very ſhort Joints. The Leaves alſo are placed by Pairs oppoſite, ſitting cloſe to the Branches; they are Five Inches long, and Two Inches and a half broad in the Middle, leſſening to both Ends, terminating in a Point; they are of a lucid Green, and have ſeveral tranſverſe Veins from the Midrib to the Borders, which are intire. The Flower is produced at the End of the Branches, ſitting cloſe to the Leaves, as is repreſented at *a*; this hath a tubulous Empalement, with Five Corners or Angles, which is cut deep into Five Parts or Segments ending in acute Points, as is ſhewn at *b*. Theſe Flowers have but One Petal; for although they appear in Front to be made up of ſeveral, yet they are all joined in One Tube below, as is repreſented at *c* and *d*, where the hinder Part of the Flower is ſhewn, with the Tube ſitting upon the Germen. The Flowers are ſome much more double than others, having Three or Four Rows of Leaves, and theſe have only a bifid Stigma on the Style; but thoſe which are leſs double, have trifid Stigma's. All the Flowers which I have examined have no Stamina; which may be occaſioned by the Fulneſs of the Flower, as it is well known that many of the double Flowers have neither Stamina nor Style; but in theſe Flowers the Style with its bifid Stigma is very remarkable, and is repreſented at *e* and *f*. The Flower, when fully blown, is as large as a middling Roſe, and emits a very agreeable Odour, but when too cloſely ſmelt to, has ſomething of the Jonquil, but not quite ſo ſtrong. It flowers here in *July* and *Auguſt*; but in the Country where it grows naturally, it is ſuppoſed to flower great Part of the Year; for the Captain who brought the Plant over, ſaid it continued a Succeſſion of Flowers the whole Voyage, till he arrived in a cold Climate, when the Weather ſtopped its Growth.

As this Plant is here inſerted out of the Order which we have hitherto purſued, ſo it renders an Apology to our Purchaſers neceſſary, leſt it may appear as if we hereby intended to extend this Work to a greater Length than was firſt propoſed; but this is very far from our Thoughts; and could we have procured a good Drawing of this Plant in proper Time, it ſhould have been introduced in its proper Place; but as this is ſo curious, and being an undeſcribed Plant, we hope our Purchaſers will not be diſpleaſed with our inſerting it here. And ſhould any very curious Plant be introduced, or flower in our Gardens, during the Courſe of this Work, we ſhall take the ſame Liberty to exhibit it, though it ſhould not exactly fall in with our alphabetical Order of Publication; for which we hope to be excuſed, as we ſhall be careful not to exceed our intended Bounds: And, by adding a complete Index to the Whole, as we propoſe doing, any of the Plants may be readily found.

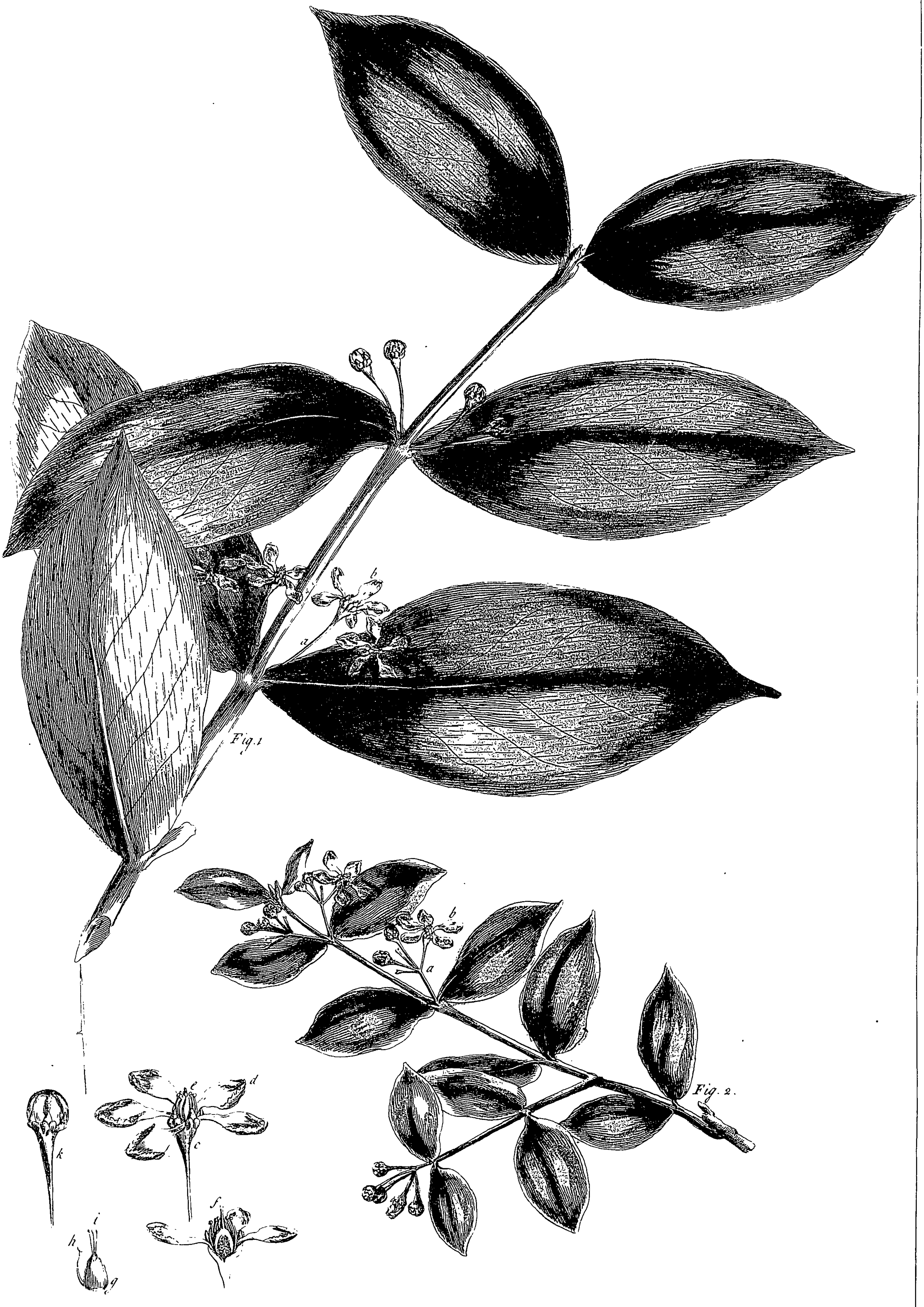

Fig. 1. **MALPIGHIA**, *foliis oblongo-ovatis acuminatis ſetis pungentibus pedunculis unifloris verticullatis*
Fig. 2. **MALPIGHIA**, *foliis ovatis integerrimis glabris, pedunculis umbellatis*

I. Miller, delin et Sculp.

Publish'd according to Act of Parliament by P. Miller Sept:28 1757

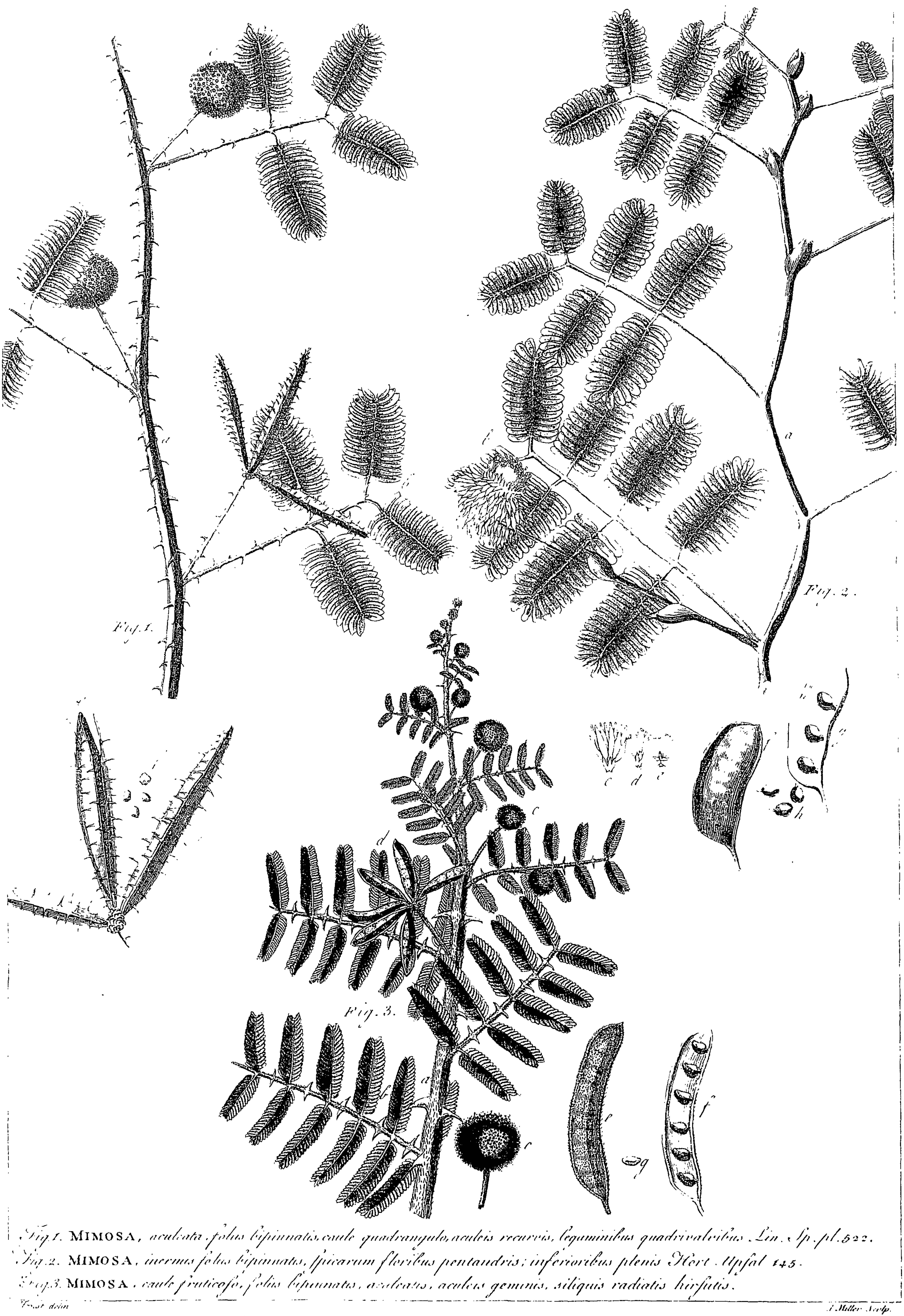

Fig. 1. **MIMOSA**, *aculeata, foliis bipinnatis, caule quadrangulo, aculeis recurvis, leguminibus quadrivalvibus. Lin. Sp. pl. 522.*

Fig. 2. **MIMOSA**, *inermis foliis bipinnatis, ſpicarum floribus pentandris; inferioribus plenis Hort. Upſal 145.*

Fig. 3. **MIMOSA**, *caule fruticoſo, foliis bipinnatis, aculeatis, aculeis geminis, ſiliquis radiatis hirſutis.*

Frost delin — J. Miller Sculp.

[illegible] Parl. [illegible] Miller [illegible] 28 1757.

PLATE CLXXI.

MALPIGHIA, *Plum. Nov. Gen.* 46. *Tab.* 36. *Lin. Gen. Plant.* 508. Barbadoes Cherry.

THIS Genus of Plants is ranged in the Third Section of *Linnæus*'s Tenth Claſs, which includes thoſe Plants whoſe Flowers have Ten Stamina and Three Styles. *Plumier* places it in the Sixth Section of *Tournefort*'s Twenty-firſt Claſs, in which he ranges the Trees and Shrubs with a Roſe Flower, whoſe Pointal becomes a fleſhy Fruit incloſing hard Seeds.

The Species here repreſented are,

Fig. 1. MALPIGHIA *foliis oblongo-ovatis acuminatis ſetis pungentibus, pedunculis unifloris verticillatis.* Malpighia with oblong oval-pointed Leaves ſet cloſe with ſtinging Briſtles, and Footſtalks with One Flower growing in Whorles round the Stalks.

The Seeds of this Plant were ſent me by Mr. *Richard*, Gardener to the King of *France* at *Trianon*, by the Title of *Bois de Capitain*, about Four Years paſt; and from them ſeveral Plants were raiſed, which have flowered the Two laſt Years in the *Chelſea* Garden. This Plant riſes with a ſtrong upright Stem about Three Feet high covered with a brown Bark, ſending out ſeveral Side Branches which grow erect, and are garniſhed with oblong oval Leaves ending in acute Points; theſe ſit cloſe to the Branches, and are cloſely covered with fine Briſtles which do not appear, unleſs cloſely viewed; but, upon handling any of the Leaves, they ſtick into the Skin, and ſting as bad as Cow-itch, ſo that it is very troubleſome to handle the Plants. The Flowers come out upon long ſlender Footſtalks, each of them ſupporting One Flower; they riſe from the Wings of the Stalk at each Joint, Four, Five, and ſometimes Six of theſe come out from the ſame Joint, ſtanding round the Stalk in a Sort of Whorles, as is repreſented at *a* and *b*. The Flower hath a ſmall permanent Empalement, which is cut into Five Parts, as is ſhewn at *c*; and Five oval Petals, repreſented at *d*, which ſpread open; and at their Baſe have Two oval convex Honey-Glands adhering to them. In the Center ariſe Ten flat Awl-ſhaped Stamina, which join and form a Cylinder, as is repreſented at *e*; theſe are terminated by ſmall Heart-ſhaped Summits. At the Bottom is ſituated a roundiſh Germen ſupporting Three Styles, as is ſhewn at *i* and *g*; theſe ſtand apart, and are crowned by ſmall obtuſe Stigmas. *f* repreſents the Germen cut through longitudinally, with One of the Styles extended beyond the Stamina; *h* ſhews one of the Stamina as it is ſituated on the Side of the Germen, and adheres to the Bottom of it with its Baſe. This Plant flowers in *July* and *Auguſt*, but has not as yet perfected Seeds in *England*.

This is very different from *Plumier*'s *Malpighia latifolia, folio ſubtus ſpinoſo*, in the Size and Shape of the Leaves. The Leaves of this are more than twice the Size of thoſe, and are armed on both Sides with thoſe ſtinging Briſtles, whereas the other have them only on their under Side; and *Plumier*'s Plant riſes with a much taller Stem than this, and but ſeldom flowers here; there are Plants of it in the *Chelſea* Garden Ten Feet high, which have not as yet flowered, tho' they thrive and are in perfect Health; but the Sort here repreſented flowers annually.

Fig. 2. MALPIGHIA *foliis ovatis integerrimis glabris, pedunculis unbellatis, Hort. Cliff.* 169. Malpighia with ſmooth, oval, entire Leaves, and Footſtalks ſupporting Umbels of Flowers. This is the *Malpighia mali punici facie, Plum. Nov. Gen* 46 Malpighia with the Appearance of Pomegranate. *Commeline* titles it *Ceraſus Jamaicenſis fructu tetrapyreno, Port. Amſt. Sp.* 145. Jamaica Cherry with a Fruit having Four Seeds.

This Sort grows plentifully in moſt of the Iſlands in the *Weſt-Indies*, but whether it is natural there, or has been lately introduced into thoſe Iſlands, is not eaſy to determine, for the Birds who devour the Fruit, have carried the Seeds all over thoſe Iſlands; ſo that the Trees grow in ſuch Plenty, where they are permitted to ſtand, as if they were Natives of the Place.

This Sort grows to be a Tree of middling Size in *America*, and we have ſeveral Plants in *England* which are upward of Ten Feet high, with ſtrong woody Stems, which are well furniſhed with Branches covered with a dark brown Bark, and garniſhed with ſmooth oval Leaves which are entire; they are placed by Pairs oppoſite, ſitting cloſe to the Branches. The Flowers are produced in Umbels from the Side and at the End of the Branches, ſtanding upon ſhort Footſtalks, as is repreſented at *a*; theſe have Five oval Petals, ranged in the ſame Order as thoſe of the former Sort, but are of a brighter red Colour, and are waved on their Edges, as is repreſented at *b*. Theſe Flowers are ſometimes ſucceeded by Fruit in *England*, which are about the Size of grey Peaſe, having a thin red Pulp covering Three or Four rough angular Seeds. The Fleſh is of a pleaſant tart Taſte, and is ſo very thin as to be of little Eſteem; but in the *Weſt-Indies*, the Fruit is ſerved up at their Tables for want of better.

This Sort flowers uſually here in *March* and *April*, but thoſe Flowers are ſeldom ſucceeded by Fruit; they alſo flower again in *July*, and when the Seaſons are warm, from theſe Flowers there is often Fruit produced; for at that Time of the Year the Plants are uſually removed into the open Air.

PLATE CLXXII.

MIMOSA, *Tourn. Inſt. R. H.* 605. *Tab.* 375. *Raii Gen. Plant.* 161. *Lin. Gen. Plant.* 597. The ſenſitive Plant.

THIS Genus of Plants is ranged in the Fifth Section of *Tournefort*'s Twentieth Claſs, which includes the Trees and Shrubs with a Flower of One Petal, whoſe Pointal becomes a Pod. Mr. *Ray* places it among the Trees which bear Pods, whoſe Flowers are not of the Butterfly Kind. Doctor *Linnæus* ranges it in the Firſt Section of his Thirteenth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina and but One Style; and under this Genus he ranges the *Acacia* of *Tournefort* and the *Inga* of *Plumier*. But as the Species of *Acacia* are very numerous, ſo it is better to keep them ſeparate, eſpecially as thereby the officinal Name of *Acacia* will be preſerved to the Genus.

The Species here repreſented are,

Fig. 1. MIMOSA *aculeata, foliis bipinnatis, caule quadrangulo, aculeis recurvis, leguminibus quadrivalvibus, Lin. Sp. Plant.* 522. Prickly ſenſitive Plant with doubly-winged Leaves, a ſquare Stalk, recurved Spines, and Pods with Four Valves. This is the *Mimoſa herbacea procumbens & ſpinoſa, caule quadrangulo, ſiliquis quadrivalvibus, Houſt. MS.* Trailing herbaceous and prickly ſenſitive Plant with ſquare Stalks, and Pods with Four Valves.

This Sort of ſenſitive Plant was diſcovered by the late Dr. *William Houſton* at *La Vera Cruz*, in *New Spain*, from whence he ſent the Seeds which ſucceeded in ſeveral Gardens here. This hath an herbaceous prickly Stalk;

the Spines are all recurved, as is repreſented at *a*. As theſe Stalks are too weak to ſupport themſelves when grown to a Length, ſo they decline to the Ground; theſe are garniſhed with winged Leaves, compoſed for the moſt part of Two Pairs of *Pinnæ*, or Wings, as is ſhewn at *b*. From the Wings of the Stalk ariſe the Footſtalks, each ſuſtaining One globular Head of purple Flowers, repreſented at *c*; theſe are ſucceeded by long Four-cornered prickly Pods, repreſented at *d*; which open with Four Valves, as is ſhewn at *e*; filled with angular Seeds, as is ſhewn at *f*. This Plant hath a perennial creeping Root, by which it multiplies greatly in the Places where it grows naturally, ſo that it ſpreads over the Sands all round the Town of *Vera Cruz*. It is One of thoſe Sorts which is generally diſtinguiſhed by the Title of humble Plants, becauſe the whole Leaf, with its Footſtalk, falls away from the Touch. This ſeems to be the *Caaeo* 1. of *Piſo*, p. 202.

Fig. 2. MIMOSA *inermis, foliis bipinnatis, ſpicarum floribus pentandris, inferioribus plenis, Hort. Upſal.* 145. Senſitive Plant without Spines, doubly-winged Leaves, Spikes of Flowers with Five Stamina, the lower being double. This is the *Mimoſa non ſpinoſa paluſtris & herbacea procumbens, flore luteo pleno, Houſt. MS.* Marſh trailing herbaceous ſenſitive Plant without Spines, and a yellow double Flower.

This Sort was alſo diſcovered by the late Doctor *Houſtoun* at *La Vera Cruz*, growing in ſtagnate Waters, where the Stalks floated on the Surface of the Water, and were flat; but, when it was cultivated on dry Ground, the Stalks grew more erect, and were round, in like manner as the perennial Arſeſmart; which in Water floats like the Pond Weeds, but in dry Ground the Stalks are erect. The Stalks are ſmooth, herbaceous, and have bending Joints, as is repreſented at *a*. From each of the Joints comes out One winged Leaf, compoſed of Three or Four Pairs of ſingle-winged Leaves, repreſented at *b*; and below the Footſtalk of the Leaf comes out that of the Flower, which grows Three or Four Inches long, having Two Appendages of Leaves (or *Bractea*) at about an Inch apart; and at the Top ſuſtains a large Head of Flowers, which are yellow, and of different Forms and Nature; thoſe on the upper Part of the Spike, or Head, have no Stamina, but are full of broadiſh Leaves of a yellowiſh Green, as is repreſented at *c*; theſe when growing together in the Head have much the Appearance of the other, but are more ſpecious; thoſe Flowers which are ſituated in the Middle are wholly Male, having Five Stamina and no Embrio, or Style, as is repreſented at *d*; but the lower Flowers are Hermaphrodite, having each Five Stamina terminated by obtuſe Summits, with a ſmall five-pointed Empalement, repreſented at *e*; in which is ſituated a Germen ſupporting a ſhort Style, crowned by a ſquare Stigma. The Germen afterwards becomes a broad compreſſed Pod, repreſented at *f*; which opens lengthwiſe with Two Valves, as is ſhewn at *g*; in which is lodged One Row of ſmooth compreſſed Seeds, as is repreſented at *h*.

When this Plant grows upon dry Land, it has much the Appearance of the *Mimoſa ſeu frutex ſenſibilis, Tourn. Inſt.* 606. but the Stalks do not grow ſo woody or upright, and the Leaves are longer, the Flowers are much larger, and the Pods are broader. A few Years ſince, I had ſome Seeds of this Sort ſent me by a Friend, who found it growing in a marſhy Spot in the Iſland of *Barbuda*; and at the ſame time he ſent me a Branch of the Plant with Flowers, in a Glaſs filled with a Lixivium, which preſerved it in full Vigour: So this Plant may probably grow in ſome of the other Iſlands.

Fig. 3. MIMOSA *caule fruticoſo, foliis bipinnatis aculeatis, aculeis geminis, ſiliquis radiatis hirſutis.* Senſitive Plant with a ſhrubby Stalk, doubly-winged Leaves which are prickly, the Spines growing by Pairs, and hairy Pods ſpread open like Rays. This is the *Mimoſa fruticoſa ſpinoſa, ſiliquis latis, hirſutis, & articulatis, Houſt. MS.* Shrubby prickly ſenſitive Plant, with broad, hairy, and jointed Pods; and the *Æſchynomena ſpinoſa* 4. *five foliolis Acaciæ anguſtioribus, frondibus validiſſimas ſpinas habentibus, Breyn. Cent.* 1. 43. The Fourth prickly ſenſitive Plant with narrow Acacia Leaves, very cloſely armed with Spines.

This Sort was diſcovered growing naturally at *La Vera Cruz* by the late Doctor *Houſtoun*, who ſent the Seeds to *England*. This riſes with a woody Stalk Five or Six Feet high, ſending out ſome Side Branches; theſe, and alſo the main Stalks, are armed with ſtrong white Spines, which are broad at their Baſe, but narrow and recurved at their Point; they are placed by Pairs oppoſite, and ſtand alternate with the Leaves; the Stalk is alſo hairy, as is repreſented at *a*. The Leaves are placed alternately on the Stalks, and are compoſed of Five or Six Pairs of ſingle-winged Leaves, repreſented at *b*; theſe have very narrow *Pinnæ*, or Wings; and between each Pair of theſe come out from the Midrib Two ſhort Spines oppoſite, ſhaped like thoſe on the Branches, but are ſmaller and not bent, ſo ſtand horizontal with the Leaves. The Flowers are collected into a round Head, as is ſhewn at *c*; they are of a bright purple Colour, and ſtand upon ſtrong Footſtalks, which ariſe from the Inſertion of the Leaves. When the Flowers decay, they are ſucceded by long compreſſed hairy Pods, which are jointed, repreſented at *e*; theſe are ſpread open like Rays, as is ſhewn at *d*. When the Pods are ripe, they open with Two longitudinal Valves, having One Seed lodged in each Joint, as is repreſented at *f*; the Seeds are oval and compreſſed, as is ſhewn at *g*. It grows plentifully in the rich moiſt Ground about the Town of *Vera Cruz*.

PLATE CLXXXIII.

MONARDA, *Lin. Gen. Plant.* 34. *Leonurus, Tourn. Inſt. R. H.* 187. *Tab.* 87. *Origanum, Cornut.* 13. Monarda, ſcarlet Leonurus, and *Oſwego* Tea.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Second Claſs, which includes thoſe Plants whoſe Flowers have Two Stamina and One Style. *Tournefort* joins the Firſt Sort to his Genus of *Leonurus*, which is ranged in the Second Section of his Fourth Claſs, in which he places the Herbs with a Lip Flower of One Leaf, whoſe upper Lip is hollowed like a Spoon.

The Species here repreſented are,

Fig. 1. MONARDA *capitulis terminalibus, caule obtuſangulo, Hort. Upſal.* 12. Monarda with Heads terminating the Stalks, which have obtuſe Angles. This is the *Leonurus Canadenſis Origani folio, Tourn. Inſt. R. H.* 187. *Canada* Lion's-Tail with an Origany Leaf. It is by *Cornutus* titled, *Origanum fiſtuloſum Canadenſe, Plant. Canad.* 14. Fiſtular Origany of *Canada*. It is by ſome called the ſcarlet Leonurus; and by others, *Oſwego* Tea, from the Uſe which the *Canadians* make of this Plant.

It hath a perennial Root compoſed of many ſtrong Fibres, which join at the Top into a fleſhy Head; theſe ſpread and increaſe greatly in rich moiſt Land, much in the ſame Manner as Baum. From the Roots ariſe many Stalks, in Number proportional to the Size of the Roots; theſe are ſtrong, have Four obtuſe Angles, and riſe from a Foot and Half to Two Feet high, according to the Goodneſs of the Ground in which they are planted. They are garniſhed with oblong oval Leaves, placed oppoſite by by Pairs; they have ſeveral Veins running from the Midrib to the Border, and are ſlightly crenated on their Edges. They are of a light Green, and, when rubbed, emit a very grateful refreſhing Odour. From the Wings of the Stalks come out Two or Three ſmall Branches, which are garniſhed with Leaves of the ſame Shape with the others, but are ſmaller. The Flowers come out in thick Whorles, or Heads, on the Top of the Stalks; and out of the Center of the Firſt Head ariſes a naked Footſtalk, about Three Inches long, ſuſtaining another Head of Flowers, which is ſmaller than the Firſt. Theſe Flowers have but One Petal, which is tubulous at Bottom, as is repreſented at *a*; but divides at the Top into Two Lips, as is ſhewn at *b* and *c*; the upper Lip *b* is hollowed like a Spoon, but is narrow and entire; the under Lip *c* is broader, reflexed, and trifid, the middle Segment being the broadeſt, as is repreſented at *f*. The Flower has but Two Stamina, which are longer than the upper Lip, as is repreſented at *d d*, which are terminated by compreſſed Summits. In the Bottom of the Tube are ſituated Four Germina, ſupporting a ſlender Style, as is ſhewn at *g*, crowned by a bifid Stigma, repreſented at *e*; and *h* repreſents the Receptaculum on which the Germen ſits. This Plant is now cultivated as an Ornament to the Pleaſure Garden; it flowers in *July* and *Auguſt*, but ſeldom produces good Seeds in *England*. The green Leaves of the Plant are by many Perſons uſed for Tea; and are preferred to Baum, and moſt other Herbs, for that Purpoſe.

Fig. 2. MONARDA *floribus capitatis ſub-didynamis, caule acutangulo, Lin. Sp. Plant.* 22. Monarda with Flowers growing in Heads which have Two ſhort and Two long Stamina, and an acute angular Stalk. This is the *Monarda floribus capitatis verticillatiſque, caule acutangulo, foliis lanceolati-ſerratis glabris, Buttn.* 226. Monarda with Flowers growing in Heads and Whorles, ſharp angular Stalks, and Smooth ſpear-ſhaped ſawed Leaves.

This hath a perennial Root, as the former, but does not ſpread ſo much. The Stalks riſe from Two Feet and a Half to Three Feet high, ſending out a few Side Branches; theſe have Four ſharp Angles, and are garniſhed with ſmooth Spear-ſhaped Leaves, placed by Pairs oppoſite. The Flowers grow in Heads, and alſo in Whorles, round the Stalks; for there is often a large Whorle of Flowers under the principal Head. Theſe Flowers have an Empalement of One Leaf, as is repreſented at *a*; which is cylindrical, and cut into Five acute Segments at the Brim. The Flower has a long ſlender Tube, which is bent, and is divided at the Top into Two Lips; the upper Lip is narrow, erect, and entire, as is repreſented at *c*; the under Lip is reflexed, and indented in Three Parts, the Middle one being the longeſt. At the Bottom of the Tube are ſituated Four Germen, ſupporting a long ſlender Style, repreſented at *d*, which is crowned by an obtuſe Stigma. And within the Tube there are Four Stamina; Two of which are ſhort, and fade ſoon after the Lips of the Flower expand; the other Two, which are repreſented at *e*, are almoſt equal in Length to the upper Lip, and are terminated by globular Summits. After the Flowers are paſt, the Four Germina become ſo many oval ſmooth Seeds, ſitting in the Empalement. This Plant flowers in *July* and *Auguſt*; and, if the Seaſon is favourable, will perfect its Seeds in the End of *September*. As this Flower is purple, ſo it makes a pretty Variety when intermixed with the foregoing Species.

PLATE CLXXXIV.

MYRTUS, *Tourn. Inſt. R. H.* 640. *Tab.* 409. *Raii Meth. Plant.* 146. *Lin. Gen. Plant.* 543. The Myrtle; in *French*, *Myrte*.

THIS Genus of Plants is ranged in the Eighth Section of *Tournefort*'s Twenty-firſt Claſs, which includes the Trees and Shrubs with a Roſe Flower, whoſe Empalement becomes a Fruit with many hard Seeds. Mr. *Ray* places it among the Trees which have an umbilicated Fruit or Berry incloſing ſeveral Seeds. Doctor *Linnæus* ranges it in the Firſt Section of his Thirteenth Claſs, which includes thoſe Plants whoſe Flowers have about Twenty Stamina and but One Style.

The Species here repreſented are,

Fig. 1. MYRTUS *latifolia Romana, C. B. P.* 468. Broad-leaved *Roman* Myrtle. This is the *Myrtus altera, Dod. Pempt.* 772. The other Myrtle.

This Sort of Myrtle grows naturally about *Rome*, where it riſes to a conſiderable Height; but in this Country, it is ſeldom more than Eight or Ten Feet high; for as it is too tender to live in the open Air, unleſs planted againſt a warm-aſpected Wall, and covered in very hard Winters, ſo there are few Places ſo well ſituated as to admit of their growing much taller; but where there are high Walls ſituated to the South, and in a warm ſheltered Situation, they will riſe much taller, eſpecially if they are protected in Winter. For I have ſeen Walls near Twenty Feet high, which were cloſely covered with Myrtle of various Sorts to the Top; but theſe were covered with Glaſſes in the Winter, and in hard Froſt the Glaſſes were covered with Straw or Mats to keep out the Froſt. The Leaves of this Sort are broader than of moſt other Species, and end in acute Points; theſe are placed by Pairs oppoſite, and ſit cloſe to the Stalks. The Flowers are produced from the Wings of the Stalks, each ſtanding upon a ſlender Footſtalk; there are ſometimes Two, and at others Four, of theſe ariſing at each Joint, from the Inſertion of the Leaves. Theſe are compoſed of Five obtuſe Petals, repreſented at *b*; having a great Number of ſlender Stamina riſing out of the Empalement, as is ſhewn at *c*; which are terminated by roundiſh yellow Summits. The Empalement, marked *d*, incloſes the Germen, from whence ariſes the Style *h*; which is crowned by an obtuſe Stigma; this is repreſented magnified at *g*. The Empalement afterward turns to an oblong oval Berry, repreſented at *e*; which changes black when ripe, and incloſes Five or Six hard Kidney-ſhaped Seeds, as is repreſented at *f*; and *i* ſhews the Seeds taken out of the Berry.

Fig. 2. MYRTUS *flore pleno, Cornut. Canad.* 203. The double flowering Myrtle.

This ſeems to be a Variety of the common *Italian* Myrtle, which was firſt diſcovered growing naturally in *Languedoc*, and has been propagated in ſo great Plenty as to be now common in moſt of the curious Gardens in *Europe*; where it is planted for the Sake of its Flowers. This Sort riſes with a woody Stalk to the ſame Height with the former; the Leaves are much narrower, and have not ſo ſtrong an Odour. The Flowers come out on ſhort Footſtalks from the Inſertions of the Leaves, as is repreſented at *a*; theſe are full of Petals, as is ſhewn at *d*; ſo have neither Stamina, Germen, or Style, and conſequently have no Fruit ſucceeding them, for the Multiplicity of Petals occupy the Place of the Parts of Generation. But as moſt double Flowers are in greater Eſteem with the Generality of Perſons than the ſingle, ſo this Sort of Myrtle is generally ſold at a greater Price, tho' it may be propagated with the ſame Facility as the common Sort.

The Berries of Myrtle are ſometimes uſed in Medicine, and are reckoned to be drying and binding; ſo are thought to be good for a Diarrhœa or Dyſentery.

PLATE CLXXV.

Nicotiana, *Tourn. Inſt. R. H.* 117. *Tab.* 41. *Raii Meth. Plant.* 81. *Lin. Gen. Plant.* 220. Tobacco, in *French*, *Nicotiane, ou Tabac.*

THIS Genus of Plants is ranged in the firſt Section of *Tournefort*'s Second Claſs, which includes the Plants with a Funnel ſhaped Flower of one Petal, whoſe Pointal turns to a Fruit. Mr. *Ray* places it in the Firſt Section of his Nineteenth Claſs, in which he ranges the Plants with a regular Flower of One Petal, which is ſucceeded by Capſules. Doctor *Linnæus* ranges it in the Firſt Section of his Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and one Style.

The Species here repreſented are,

Fig. 1. Nicotiana *foliis lanceolatis acutis, ſeſſilibus, calycibus acutis, tubo floris longiſſimo.* Tobacco with Spear-ſhaped Leaves ending in acute Points ſitting cloſe to the Stalks, ſharp-pointed Empalements, and a very long Tube to the Flower. This is the *Nicotiana major anguſtifolia, C. B. P.* 170. Greater Tobacco with a narrow Leaf. This Sort of Tobacco grows naturally on the Coaſt of *Guinea*, from whence I have received the Seeds; it alſo grows in the *Braſils*, where it is cultivated, and ſent to *Europe* by the Title of ſweet-ſcented Tobacco.

This Sort riſes with an upright branching Stalk Four or Five Feet high, garniſhed with Leaves which are more than a Foot and Half long, and Four Inches broad in the Middle, ending in acute Points. They are a little waved on their Edges, and have many deep tranſverſe Veins going from the Midrib to the Edges, and in warm Weather ſweat out a clammy Juice; the upper Leaves are much narrower and ſhorter. The Flowers are produced in looſe Bunches at the End of the Stalks; thoſe which come out from the Wings of the Stalk ſtand on long Footſtalks, which do each ſuſtain Four or Five Flowers; but thoſe at the Top of the Stalk ſit very cloſe; theſe have Empalements, which are cut into Five acute Segments. The Tube of the Flower is very long, as is repreſented at *a*; and at the Top is divided into Five Angles or Points which ſpread open, as is repreſented at *b*; where the Flower is cut open longitudinally to ſhew the Situation of the Five Stamina; Four of which, marked *c*, are longer than the other; theſe are terminated by oblong erect Summits. At the Bottom of the Empalement, marked *e*, is ſituated the Germen, ſupporting a long ſlender Style *d*, crowned by an obtuſe Stigma; which afterward becomes a conical Veſſel, as is repreſented at *f*, with a longitudinal Furrow on each Side, repreſented at *g*, opening at the Top; having Two Cells, as is ſhewn at *h* and *i*, where the Capſule is opened longitudinally, and cut tranſverſly to ſhew the Situation of the ſmall Seeds *k*; One of which is magnified at *l*. This Plant will live thro' the Winter if it is protected from the Cold; but as the Seeds ripen annually, ſo there are few Perſons who are at the Trouble to preſerve them.

Fig. 2. Nicotiana *foliis ovato-lanceolatis, obtuſis, rugoſis, calycibus breviſſimis.* Tobacco with oval Spear-ſhaped Leaves, which are obtuſe and rough, and very ſhort Empalements to the Flower. This is the *Nicotiana humilis, primulæ veris folio, Houſt. MS.* Dwarf Tobacco with a Primroſe Leaf.

This Plant was diſcovered by the late Doctor *Houſtoun* at *La Vera Cruz*, from whence he ſent the Seeds to *England*. It hath a thick Tap Root which runs deep into the Ground, ſending out ſome ſmall Fibres from the Sides; and from the Top come out Six or Seven oval Spear-ſhaped Leaves, which ſpread near the Ground. They are about the Size of thoſe of the common Primroſe, but of a deeper Green. The Flower Stalk riſes about a Foot high, branching into Three or Four Diviſions, each of which is terminated by a looſe Spike of tubulous ſmall Flowers of a yellowiſh-green Colour, ſitting in very ſhort Empalements. Theſe are ſucceeded by ſmall oval Capſules with Two Cells, filled with ſmall Seeds.

PLATE CLXXVI.

Vinca, *Lin. Gen. Plant.* 261. *Pervinca, Tourn. Inſt. R. H.* 119. *Tab.* 45. *Clematis Daphnoides, Raii Meth.* Perriwinkle; in *French*, *Pervenche.*

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and One Style. *Tournefort* places it in the Firſt Section of his Second Claſs, which contains the Herbs with a Funnel-ſhaped Flower of One Leaf, whoſe Pointal becomes the Fruit. Mr. *Ray* puts it in his Eighteenth Claſs, which contains the Plants with a regular Flower which is ſucceeded by Two Pods.

The Species here repreſented is,

Vinca *foliis oblongo-ovatis integerrimis, tubo floris longiſſimo, caule ramoſo fruticoſo.* Perriwinkle with oblong oval entire Leaves, a very long Tube to the Flower, and a branching ſhrubby Stalk.

The Seeds of this Plant were brought from *Madagaſcar* to *Paris*, and ſown in the King's Garden at *Trianon*, where they ſucceeded; and from thence I was furniſhed with the Seeds, which ſucceeded in the *Chelſea* Garden. It riſes with an upright branching Stalk to the Height of Three or Four Feet; which at firſt is herbaceous and ſucculent, covered with a ſmooth purpliſh Skin, but afterwards it becomes ligneous and tough. This divides upward into ſeveral Branches, which are garniſhed with oblong oval ſmooth Leaves, which are fleſhy and entire. At the Baſe of the Leaves comes out one Flower with a very long Tube; which is divided at the Top into Five broad obtuſe Segments, which ſpread open flat, and are of a bright Peach Colour on their upper Side, as is repreſented at *a*; but of a pale Bluſh Colour on the under, as is ſhewn at *b*. Theſe have a very ſhort Empalement, which is cut at the Brim into Five acute Segments, as is repreſented at *c*; and at *d*, the Flower is cut open longitudinally to ſhew the Situation of the Five Stamina, which are cloſely joined to the Tube of the Petal, ſo as not to be ſeparated from it; and the Summits are faſtened to the Mouth of the Tube. *e* repreſents the ſhort Empalement which is cut at the Top into Five acute Segments, in which is ſituated the Germen ſupporting a ſlender Style; which is the Length of the Tube, and is crowned with Two Stigmas, ſhewn at *f*; the lower is orbicular and compreſſed, but the upper is round and concave. Theſe are cloſely ſurrounded by the Awl-ſhaped Summits, One of which is repreſented magnified at *g*; and by the Side is another of its natural Size. *h*, *i*, and *k*, ſhew the Empalement with the Germen, Style, and Stigmas magnified; *l*, ſhews the Seed Veſſel when ripe cut open longitudinally, and *m*, repreſents it entire; *n*, ſhews the Seeds taken out of the Capſule.

If the Flowers of this Plant are cloſely ſmelt to, they have a faint Odour of the Poppy, but this is not ſo ſtrong as to be perceived at a ſmall Diſtance. There is a Succeſſion of theſe Flowers on the Plants for at leaſt Nine Months in the Year; for they begin to appear the latter End of *March* or the Beginning of *April*, and continue to the End of *December*; ſo that for Three Months in Winter they make a fine Appearance in the Houſe.

As this Plant is a great Novelty in *Europe*, we have exhibited it out of the Order which we have obſerved in the Courſe of this Work; but as it is much in Eſteem at preſent, we hope there will need no Apology for ſo doing, becauſe the Figure of this Plant has not as yet been exhibited by any Perſon.

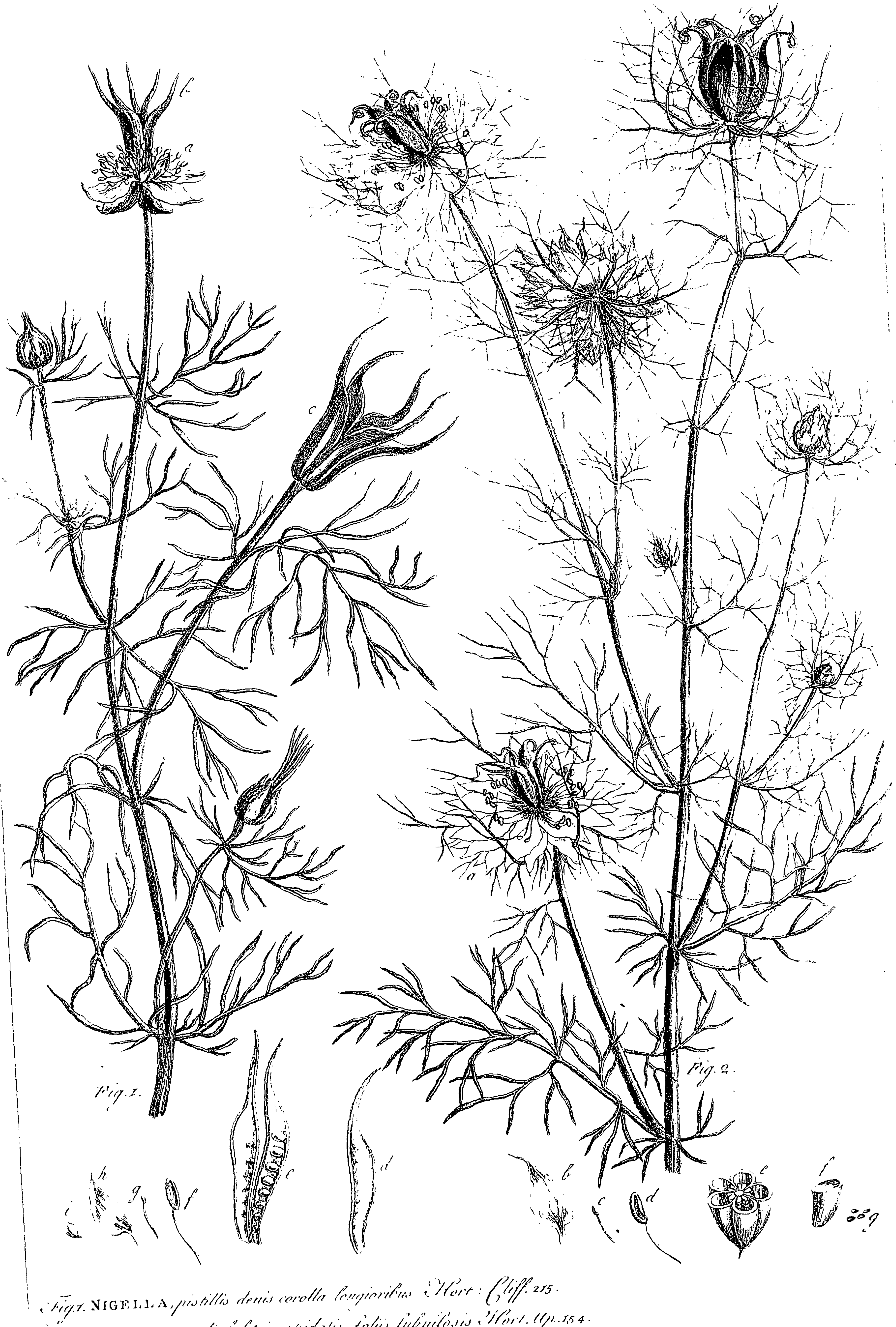

Fig. 1. **NIGELLA**, *piſtillis denis corolla longioribus Hort: Cliff. 215.*

Fig. 2. **NIGELLA**, *petalis ſubtricuſpidatis, foliis ſubpiloſis Hort. Up. 154.*

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PLATE CLXXVII.

NIGELLA, *Tourn. Inſt. R. H.* 258. *Tab.* 134. *Raii Meth. Plant.* 111. *Lin. Gen. Plant.* 606. Fennel Flower, or Devil in a Buſh.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Sixth Claſs, which includes the Herbs with a Roſe Flower, whoſe Pointal turns to a Fruit with many Capſules. Mr. *Ray* places it in the Second Section of his Twenty ſecond Claſs, which contains the Herbs with an uniform regular Flower of Five Petals, whoſe Seeds are included in Capſules. Doctor *Linnæus* ranges it in the Fifth Section of his Thirteenth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina and Five Styles.

The Species here repreſented are,

Fig 1. NIGELLA *piſtillis denis corolla longioribus, Hort. Cliff.* 215. Fennel Flower with Ten Pointals which are longer than the Petals. This is the *Nigella Orientalis flore flaveſcente, ſemine alato plano, Tourn. Cor.* 19. Eaſtern Fennel Flower with a yellowiſh Flower, and a flat winged Seed. Doctor *Morriſon* titles it, *Nigella Chalepenſis lutea, corniculis longioribus, Hiſt.* 3. *p.* 516. Yellow Fennel Flower of *Aleppo* with longer Horns.

This Plant grows naturally in the Corn Fields about *Aleppo*, from whence the Seeds were firſt brought to *Europe*, where the Plants have been cultivated many Years in ſome curious Gardens. It is an annual Plant which riſes with a branching Stalk a Foot and Half high, garniſhed with pretty long Leaves, which are divided into many long narrow Segments to the Midrib. Theſe Segments are again divided into Two, Three, or Four Parts at the Top; the Flowers are produced at the End of the Branches. They are compoſed of Five oblong yellow Petals ending in acute Points; and at the Baſe of theſe are placed Eight Nectariums, with a great Number of Stamina ariſing between them, as is repreſented at *a*; and between theſe are ſituated ſometimes Five, at others Eight, Nine, or Ten Germina, which are oblong and compreſſed, terminating with ſo many Styles, to which the Stigmas are faſtened longitudinally, as is ſhewn at *b*. The Germina afterward turn to ſo many horned Capſules, repreſented at *c*, which join at their Baſe; having Two longitudinal Seams, as is ſhewn at *d*; the outer one opening as repreſented at *e*, ſhowing how the compreſſed Seeds are ranged within. *f* ſhews one of the Stamina with its Summit magnified, and *g*, one of the natural Size. *h* ſhews a ſingle Petal taken from the Flower, and *i*, one of the Nectariums or Honey Cells.

Fig. 2. NIGELLA *petalis tricuſpidatis, foliis ſubpiloſis, Hort. Upſal.* 154. Fennel Flower whoſe Petals end with Three Points, and the Leaves are a little hairy. This is the *Nigella anguſtifolia, flore majore cæruleo, C. B. P.* 145 Narrow-leaved Fennel Flower with a larger blue Flower.

This is an annual Plant which grows naturally in ſeveral Parts of *Aſia*; it riſes with a branching Stalk near Two Feet high, garniſhed with Leaves which are finely cut like thoſe of Fennel. The Flowers are produced at the End of the Branches, as thoſe of the other Sort. Theſe are compoſed of a greater Number of Petals than the other, but have no Nectariums. They have a great Number of Stamina, and the Petals end with Three acute Points, as is repreſented at *a*; but the inner Petals end with One Point, as is ſhewn at *b*. At *c*, is One of the Stamina with its Summit of the natural Size; and *d* ſhews One magnified. At *e* are repreſented the Five Capſules, which in this Sort are ſwollen, and cut tranſverſely; and *f* is One of them ſeparated; theſe are filled with ſmall angular Seeds, repreſented at *g*. Theſe Plants produce their Flowers from *June* to *September* in a Succeſſion, ſo are cultivated in the Flower Gardens for Ornament. Their Seeds ripen in the Autumn.

PLATE CLXXVIII.

OENOTHERA, *Lin. Gen. Plant.* 424. *Onagra, Tourn. Inſt. R. H.* 302. *Tab.* 156. *Lyſimachia ſiliquoſa, Raii Meth.* 100. Tree or Night Primroſe.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Eighth Claſs, which includes thoſe Plants whoſe Flowers have Eight Stamina and One Style. *Tournefort* ranges it in the Ninth Section of his Sixth Claſs, which contains the Herbs with a Roſe Flower whoſe Empalement becomes a dry Fruit. Mr. *Ray* places it in the laſt Section of his Twentieth Claſs, which includes the Herbs with a Flower of Four Leaves, which is of an anomalous Figure.

The Species here repreſented is,

OENOTHERA *foliis radicalibus ovatis, caulinis lanceolatis, obtuſis, capſulis ovatis ſulcatis.* Night Primroſe with oval Leaves at the Root, thoſe upon the Stalk Spear-ſhaped and blunt-pointed, and oval furrowed Seed-veſſels.

This Plant grows naturally in *Canada*, from whence the Seeds were brought to the Royal Garden at *Paris*; and Part of the Seeds were ſent me by Mr. *Richard*, the King's Gardener at *Trianon*, which have ſucceeded in the *Chelſea* Garden. This is a perennial Plant with a fibrous Root, from which come out many oval Leaves which ſit cloſe to the Ground, as is repreſented at *a*. From between theſe ariſe One or Two ſlender branching Stalks, which grow near a Foot high, garniſhed with Spear ſhaped Leaves ending in blunt Points, as is ſhewn at *b*; theſe are of a light Green, and ſit cloſe to the Branches. The Flowers come out ſingly from the Wings of the Leaves, as is repreſented at *c*. Theſe have an Empalement of One Leaf, cut into Five acute

Segments which are deflexed, as is ſhewn at *d*. The Flowers are compoſed of Four oval Petals, which are indented at their Points. They are of a bright yellow Colour; and within the Petals are ſituated Eight Stamina, which are terminated by oval Summits, as is repreſented at *e*; theſe ſpread open, and are little more than Half the Length of the Petals. Under the Tube of the Empalement is ſituated an oblong Germen, ſupporting a ſlender Style, which is ſhorter than the Stamina, and is crowned by a four-pointed Stigma, repreſented at *f f*. The Stigma is oblong, thick, and ſpreads open, lying upon the Four Petals of the Flower when it is fully blown; but, after the Petals fall off, theſe are contracted before they drop. The Germen, which is ſituated below the Tube of the Empalement, afterward turns to an oval furrowed Capſule, repreſented at *g*; having Four Cells, opening with Four Valves, as is ſhewn at *h*, incloſing many angular Seeds adhering to a four-cornered Column in the Center. *i* ſhews the Capſule cut tranſverſely; *k*, the Seeds of their natural Size; and *l*, ſhews One of them magnified. This Plant begins to ſhew its Flowers in *June*, and there is generally a Succeſſion of the Flowers till the Autumn; and the Seeds ripen about Two Months after the Flowers have fallen, in the ſame Succeſſion.

PLATE CLXXXIX.

OENOTHERA, *Lin. Gen. Plant.* 424, &c. Tree Primroſe.

THESE Plants are of the ſame Genus with that in the former Plate; ſo the ſame References to the Claſſes of the different Authors will do for this.

The Species here repreſented are,

Fig. 1. OENOTHERA *foliis lanceolatis dentatis, caule hiſpido.* Tree Primroſe with Spear-ſhaped indented Leaves, and a prickly Stalk. This is the *Oenothera foliis lanceolatis, capſulis acutangulis, Lin. Sp. Plant.* 346. Tree Primroſe with Spear-ſhaped Leaves, and Capſules with acute Angles. *Tournefort* titles it, *Onagra anguſtifolia, caule rubro, flore minori, Inſt. R. H.* 302. Narrow-leaved Tree Primroſe with a red Stalk and a ſmaller Flower.

This Plant grows naturally in *Virginia*, from whence the Seeds were firſt brought to *Europe*; but having been long cultivated in Gardens, the Seeds have ſcattered, and thereby propagated the Plants in ſo great Plenty, as to appear as if it was a Native of *England*; for where any of the Seeds have been accidentally ſcattered upon Dunghills or waſte Spots of Ground, the Plants have come up in Plenty the following Spring.

This Sort is a biennial Plant, which rarely flowers the ſame Year the Seeds were ſown. The Firſt Year there are a great Number of pretty broad Spear-ſhaped Leaves produced, which ſpread flat on the Ground in a circular Order, like that of a full-blown Roſe. The Spring following ariſes an upright red Stalk near Three Feet high, having many rough Prickles the whole Length, and garniſhed with ſpear-ſhaped Leaves, which are a little indented on their Edges, ending in acute Points. The Flowers are produced ſingly from the Wings of the Leaves; which are compoſed of Four oval Petals, indented at the Top, as is repreſented at *a*. Theſe are of a bright yellow Colour, and have an Empalement of One Leaf, cut into Four acute Segments, which are deflexed, as is ſhewn at *b*. From the Tube of the Empalement ariſe Eight Stamina, repreſented at *c c*; which are terminated by oblong proſtrate Summits. In the Center ariſes a Style, which is ſituated upon the Germen at the Bottom of the Empalement; it is ſhorter than the Stamina, and crowned by Four thick oblong Stigmas, as is repreſented at *d d*. After the Flower is paſt, the Germina *f f* turn to oblong angular Capſules, repreſented at *g*; with Four Cells, opening with Four Valves, in the Center of which is ſituated a long Column, to which adhere a great Number of ſmall Seeds, as is ſhewn at *h*; and at *i* the Capſule is repreſented cut tranſverſely. *k* ſhews Two of the Seeds magnified.

Fig. 2. OENOTHERA *foliis ovato-lanceolatis planis, Virid. Cliff.* 33. Tree Primroſe with oval Spear-ſhaped plain Leaves. This is the *Oenothera foliis ovato-lanceolatis, denticulatis, floribus lateralibus in ſummo caulis, Hort. Cliff.* 144. Tree Primroſe with oval Spear-ſhaped indented Leaves, and Flowers proceeding from the Wings of the Leaves on the upper Part of the Stalk. *Tournefort* titles it, *Onagra latifolia, Inſt. R. H.* 302. Broad-leaved Tree Primroſe; and by *Caſpar Bauhin*, *Lyſimachia lutea corniculata, Pin.* 245. Yellow horned Looſeſtrife.

This Plant is alſo a Native in *North America*; but was the firſt Species of the Genus which was brought to *Europe*, ſo is more commonly ſeen in the Gardens than any of the other Species. In ſome Parts of *Europe*, this is ſpread about from the Gardens in ſuch Plenty, as that it might be ſuppoſed a Native there. In a ſmall Wood near *Haerlem* in *Holland*, this Plant covered the Ground, inſomuch that many ſkilful Perſons ſuppoſed it was a Native of that Place. But it may be eaſily accounted for; becauſe the Gardeners, who live near that Place, are chiefly Floriſts, and they annually change the Earth of the Beds in their Gardens; ſo by carrying out of their old Earth from their Beds, in which many of the Seeds were ſcattered, the Plants came up there; and thoſe being ſuffered to ſcatter their Seeds, had filled the whole Wood with the Plants.

This differs from the firſt Sort, in having broader Leaves; the Stalks grow taller, and the Flowers are much larger. Both theſe Sorts will thrive in the Smoak of *London* better than moſt other Plants.

Pl. CXC.

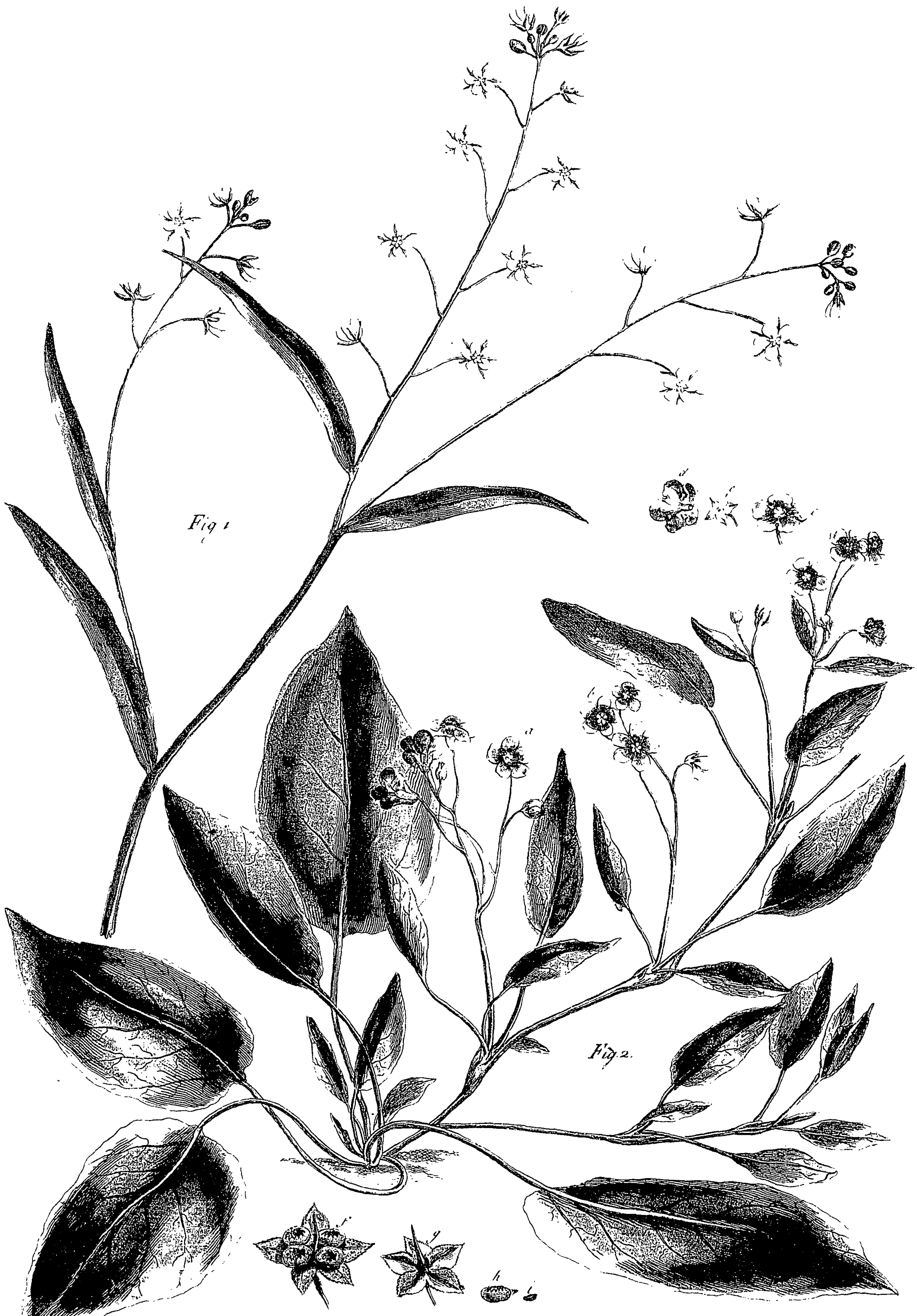


Fig 1. OMPHALODES, *Luſitanica elatior, Cynogloſsi folio Tourn. Inſt. R. H. 140.*
Fig 2. OMPHALODES, *Pumila verna Symphyti folio Tourn. Inſt. R. H. 140.*

J. Miller sculp.

[illegible] Octobr 31 [illegible]

PLATE CXC.

OMPHALODES, *Tourn. Inſt. R. H.* 140. *Tab.* 58. *Linum umbilicatum, Raii Meth. Plant.* 57. *Cynogloſſum, Lin. Gen. Plant.* 168. Venus Navelwort.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort's* Second Claſs, which includes the Herbs with a Funnel or Wheel-ſhaped Flower of One Petal, whoſe Pointal ariſes from Four Embryos, which turn to ſo many Seeds that ripen in the Empalement. Mr. *Ray* places it in his Thirteenth Claſs, which contains the Herbs with rough Leaves whoſe Flowers are ſucceeded by Four naked Seeds. Doctor *Linnæus* places it in the Firſt Section of his Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and Four Styles; and he joins it to the Genus of *Cynogloſſum*, or Hound's-tongue.

The Species here repreſented are,

Fig. 1. OMPHALODES *Luſitanica elatior, Cynogloſſi folio, Tourn. Inſt. R. H.* 140. Taller *Portugal* Navelwort with a Hound's-tongue Leaf.

This Species is generally confounded with the *Omphalodes Luſitanica linifolio, Tourn. Inſt.* 140. *Portugal* Navelwort with a Flax Leaf; which is titled by *Parkinſon*, and other old Authors, *Linum umbilicatum*; and in *Engliſh* is called, *Venus* Navelwort. But the former old Sort, which was cultivated in the Gardens, is almoſt loſt in *England*; for the Sort here figured being a larger Plant, and making a better Appearance, has been generally cultivated ſince it was introduced, and the old one has been neglected. Theſe Two Sorts grow naturally in *Portugal*, but were not diſtinguiſhed till *Tournefort* was there, who obſerved their Difference, and inſerted them in his *Inſtitutions* as diſtinct Species, which they undoubtedly are; for I have many Years cultivated them both, and have never found them vary.

This riſes with a branching Stalk Eight or Nine Inches high, garniſhed with Spear-ſhaped narrow Leaves; but the Bottom Leaves are much broader. They are of a grey Colour and ſmooth. The Flowers grow in a looſe Bunch at the End of the Branches; they are white, and compoſed of Four roundiſh Petals ſpread open. Theſe have an Empalement of One Leaf, cut almoſt to the Bottom in Four narrow acute pointed Segments, which ſpread open between the Petals. In the Tube of the Flower are ſituated Five ſhort Stamina, terminated by roundiſh Summits. In the Center are ſituated Four roundiſh depreſſed Germina, from which ariſes an Awl-ſhaped Style, crowned by an indented Stigma; the Germina afterward become Four depreſſed concave roundiſh Seeds ſitting in the Empalement. This flowers in *June*, and the Seeds ripen in the Autumn, and then the Plants decay. It is titled by Doctor *Linnæus*, *Cynogloſſum foliis lineari-lanceolatis glabris, Hort. Cliff.* 47. *i. e.* Hound's-tongue with ſmooth narrow Spear-ſhaped Leaves.

Fig. 2. OMPHALODES *pumila verna, Symphyti folio, Inſt. R. R.* 140. Low Spring Navelwort with a Comfrey Leaf. This is by *Caſpar Bauhin* titled, *Symphytum minus Boraginis facie, Pin.* 259. Smaller Comfrey with the Appearance of Borage. *John Bauhin* calls it, *Symphytum pumilum repens, ſive Borago minima Herbariorum, Hiſt.* 3. 597. *i. e.* Low creeping Comfrey, or the leaſt Borage of the Herboriſts. Doctor *Linnæus* titles it, *Cynogloſſum repens, foliis radicalibus cordatis, Hort. Cliff.* 47. *i. e.* creeping Hound's-tongue with Heart-ſhaped lower Leaves.

This is a perennial Plant with trailing Stalks, which put out Roots from the Joints by which it propagates. The lower Leaves are Heart-ſhaped, rough, and like thoſe of Borage; the upper are Spear-ſhaped. The Flowers are produced upon branching Footſtalks from the Side of the Stalks. Theſe divide into Four or Five ſmall ones, each ſuſtaining a blue Flower of one Petal, as is repreſented at *a*, which has a ſhort Tube; but is divided above in Five roundiſh Segments, as is ſhewn at *b* and *c*. Theſe ſit in an Empalement, which is cut into Five acute Segments, repreſented at *e*, and *d* ſhews the hinder Part of the Flower with the Tube, taken out of the Empalement. After the Flower is paſt, the four Germina, ſituated in the Empalement, turn to Four concave, roundiſh, depreſſed Seeds, as is repreſented at *f*; *g* ſhews the Empalement after the Seeds are fallen. *h* ſhews a ſingle Seed taken out of its Cover magnified, and *i*, of the natural Size. It flowers in *April* and *May*, and delights in a moiſt ſhady Situation.

PLATE CXCI.

OPUNTIA, *Tourn. Inſt. R. H.* 239. *Tab.* 123. *Opuntia ſeu Tuna, Raii Meth. Plant.* 144. *Cactus, Lin. Gen.* 539. *Indian* Fig or prickly Pear; in *French*, *Raquette, ou Cardaſſe.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Sixth Claſs, which includes the Herbs with a Roſe Flower, whoſe Pointal or Empalement becomes a Fruit with One Capſule. Mr. *Ray* places it among the Trees which have a large, ſoft, umbilicated Fruit. Doctor *Linnæus* has joined this Genus, and the *Cereus*, *Melocactus*, and *Pereſkia* together, making them Species of the ſame Genus, and ranges it in the Firſt Section of his Twelfth Claſs, which includes thoſe Plants whoſe Flowers have about Twenty Stamina and One Style.

The Species here repreſented is,

OPUNTIA *folio minori, rotundiori, & compreſſiori, Tourn. Inſt. R. H.* 239. *Indian* Fig with a ſmaller, rounder, and more compreſſed Leaf. This is the *Ficus Indica ſeu Opuntia folio minori, rotundiori, & compreſſiori, H. L.* *Indian* Fig or Opuntia with a ſmaller, rounder, and more compreſſed Leaf.

This Plant grows naturally in the more northern Parts of *America*. It was brought from *Nova Scotia*, where it is ſaid to grow common; but has been many Years preſerved in the *Engliſh* Garden, where it has ſeveral Years ſtood in the open Air without Shelter, upon a dry Soil, and in a warm Situation. This Species has been generally confounded with the *Opuntia Herbariorum, J. B.* which is a much larger Plant, and armed with ſtronger Prickles. The Fruit is alſo much larger, and of a deeper purple Colour. The Leaves, or rather the Diviſions of the Branches between the Joints, are rounder, and more compreſſed in this Sort. Beſides, that Sort is not near ſo hardy as this, nor do the Branches ſpread on the Ground, but grow more erect.

This hath a Root compoſed of a great Number of Fibres, which ſtrike down deep into the Ground where they do not meet with Obſtruction. The Branches are oval and compreſſed; they are fleſhy, ſucculent, and covered with a tough herbaceous Skin, out of which come ſmall Leaves at Diſtances all over their Surface; and from the ſame Points there are ſeveral ſmall almoſt imperceptible Spines come out; which, on the Branches being handled, faſten themſelves in the Skin, and are very troubleſome. From the Edges of the Branches come out the Embryo of the Fruit, as is repreſented at *b*; which is oblong, thick, ſucculent, and garniſhed with Leaves and Spines, in like manner with the Branches. Upon the Top of this is ſituated the Flower, repreſented at *a*; which is compoſed of many concave Petals, diſpoſed in a circular Form, and in the Middle of the Day ſpread open; but in the Evening they contract cloſe over the Parts of Generation, to ſcreen them from Dew and the cold Air. Within the Petals are ranged a great Number of Stamina, which are terminated by oblong Arrow-pointed Summits, repreſented at *c*; one of which is taken out and ſhewn of the natural Size at *d*, and another, a little magnified, at *e*. At *f* is repreſented One of the Petals in Front, and at *g* is One with its hinder Part; *h* and *i* are Two of the inner Petals repreſented of their natural Size; at *k* is repreſented the Fruit when fully grown; and *l* ſhews the Style crowned by a thick Stigma divided into Six Parts. *m* repreſents the Fruit cut through the Middle to ſhew the Seeds; *n* is One of the Seeds magnified, and at *o* are Two Seeds of their natural Size. It flowers in *June* and *July*; and, in warm Seaſons, the Fruit will ripen in *England*.

PLATE CXCII.

ORNITHOGALUM, *Tourn. Inſt. R. H.* 378. *Tab.* 203. *Raii Meth. Plant.* 119. *Lin. Gen. Plant.* 377. Star of *Bethlehem*.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Ninth Claſs, which includes the Herbs with a Lily Flower of Six Petals, whoſe Pointal turns to a Fruit. Mr. *Ray* places it in the Third Section of his Twenty-third Claſs, in which are contained what he ſtyles, the flowering Graſs-leaved Plants which have Six Petals. Doctor *Linnæus* ranges it in the Firſt Section of his Sixth Claſs, which includes thoſe Plants whoſe Flowers have Six Stamina and One Style.

The Species here repreſented is,

ORNITHOGALUM *racemo conico laxo, pedunculis longiſſimis, floribus erectis.* Star Flower with a looſe conical Bunch of Flowers, which grow erect upon very long Footſtalks.

This Plant hath a round, fleſhy, bulbous Root, about the Size of a Marble, covered with a white Skin; from which ariſe Four or Five Leaves, which embrace each other at their Baſe. They are flat, ſmooth, of a deep Green, and entire; about Eight or Nine Inches long, and Half an Inch broad in the Middle. From between the Leaves come out One, Two, and ſometimes Three Flower Stalks, which riſe about a Foot high. They are naked up to the Flowers, under which are ſituated Three or Four Leaves, as is repreſented at *a*; theſe ſit cloſe to the Stalk at their Baſe, where they are broadeſt, and end in acute Points. The Flowers come out upon very long Footſtalks; they are, at their firſt Appearance, cloſely wrapped up, as is ſhewn at *b*, but afterward are expanded in the Manner repreſented at *c*. Theſe are compoſed of Six oblong oval Petals, as is ſhewn at *d*, which are of a pure White. Within theſe are ſituated Six Stamina, which are not more than Half the Length of the Petals, as is ſhewn at *e*; theſe are terminated by roundiſh Summits. At the Baſe of the Petals is ſituated a roundiſh Germen, from which ariſe Two Styles, as is repreſented at *h*; one of which is permanent, but the other ſoon falls off; the permanent one is marked *f*, and the other *g*. When the Flowers decay, the Germen ſwells to a roundiſh Capſule, as is repreſented at *i*; which has Three Cells opening with Three Valves, containing many roundiſh Seeds. It flowers in *May*, and the Seeds ripen in *July*.

This Sort grows naturally at the *Cape of Good Hope*, from whence I received the Roots, which have flowered for ſome Years paſt in the *Chelſea* Garden; and one Year the Seeds ripened perfectly. It is too tender to thrive in the open Air in *England*, but requires no artificial Heat, ſo may be preſerved in a Greenhouſe in Winter. In Summer the Leaves decay; at which Time the Roots may be taken up, and kept in a dry Place for Two Months, and then planted again in the Autumn; for the Leaves come up ſoon after, and continue all the Winter and Spring. This Plant makes a pretty Appearance during the Continuance of the Flowers, which is near a Month, if the Seaſon is not very warm, or the Plants too much expoſed to the Sun.

PLATE CXCIII.

Orobus, *Tourn. Inſt. R. H.* 393. *Tab.* 214. *Raii Meth.* 104. *Lin. Gen. Plant.* 708. Bitter Vetch; in *French*, *Orobe*.

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Tenth Claſs, which includes the Herbs with a Butterfly Flower, whoſe Pointal turns to a long Pod, with One Capſule. Mr. *Ray* places it in the Second Section of his Twenty-firſt Claſs, which contains the leguminous Plants with winged Leaves which do not climb. Doctor *Linnæus* ranges it in the Third Section of his Seventeenth Claſs, which includes the Plants whoſe Flowers have Ten Stamina joined in Two Bodies.

The Species here repreſented are,

Fig. 1. Orobus *foliis pinnatis ovato-oblongis, ſtipulis rotundato-lunatis dentatis, caule ſimplici, Lin. Sp. Plant.* 728. Bitter Vitch, with oblong oval winged Leaves, roundiſh Moon-ſhaped indented Stipulæ, and a ſingle Stalk.

This Plant grows naturally in *Siberia*, from whence the Seeds were brought to the Imperial Garden at *Peterſburgh*, where they ſucceeded; and from thence the Seeds were ſent me a few Years paſt. This hath a perennial Root, and an annual Stalk, which decays early in the Autumn. In the Spring there are Three or Four Stalks which riſe from the Root, in Number proportional to the Strength and Age of the Roots. Theſe are near a Foot long; they are herbaceous, ſmooth, and, if not ſupported, decline toward the Ground. The Leaves come out from the Joints of the Stalk; they are winged, and compoſed of Four or Five Pair of oblong oval Lobes, as is repreſented in the Figure; theſe are of a yellowiſh green Colour, contracting every Afternoon, and in wet Weather, but expand in the Morning. The Flowers come out from the Wings of the Leaves upon Footſtalks, which are about Three or Four Inches long, and divide into ſmaller, each ſuſtaining One purple Butterfly Flower, with a ſhort tubulous Empalement, cut at the Top into Five acute Segments, repreſented at *a*, out of which ariſes the Flower, compoſed of a broad reflexed Standard, repreſented at *b b*, and an oval concave Keel, marked *c*. The Two Wings are ſmall, and almoſt hid by the Keel, repreſented at *e*, where they are contracted; but One of them is ſhewn at *d*, which is ſpread open; *f* ſhews the Stamina with their Summits, and *g* the Style with its Stigma. Theſe Flowers appear towards the End of *April*, and are ſucceeded by long Pods, repreſented at *h*, which open lengthways, as is repreſented at *i*, and contain one Row of roundiſh Seeds, which ripen in *July*.

Fig. 2. Orobus *foliis pinnatis ovatis acutis, quatuor jugatis, caule ſimplici.* Bitter Vetch, with oval acute winged Leaves, having Four Pair of Lobes, and a ſingle Stalk. This is the *Orobus Venetus*, *Cluſ. Hiſt.* 232. The *Venetian* Vetch.

The Title of this Plant upon the Plate was, by Miſtake, tranſpoſed from another Drawing; ſo the Reader is deſired to correct it, as it was occaſioned by the Change of our Engravers.

This hath a perennial Root, from which ariſe Two or Three ſingle Stalks about a Foot long, garniſhed with winged Leaves, compoſed of Four Pair of oval Lobes ending in acute Points. They are ſmooth, of a yellowiſh Green, and ſtand pretty far diſtant upon the Midrib. The Flowers come out from the Wings of the Leaves upon ſlender Footſtalks, each ſuſtaining Four or Five purple Flowers, ſhaped like thoſe of the firſt Sort, but ſmaller, and not ſo openly expanded. Theſe Flowers appear toward the End of *March*, and continue great Part of *April*, but ſeldom are ſucceeded by Seeds in *England*.

PLATE CXCIV.

Osteospermum, *Lin. Gen. Plant.* 887. *Chryſanthemoides, Tourn. Act. R. Par.* 1705. *Monilifera, Vaill. Act. R. Par.* 1720. Hard-ſeeded Chryſanthemum.

THIS Genus of Plants is ranged in the Fourth Section of *Linnæus*'s Nineteenth Claſs, which includes thoſe Plants with compound Flowers which have hermaphrodite Flowers in the Center that are barren, and female Flowers in the Margin which are fruitful.

The Species here repreſented is,

Fig. 1. Osteospermum *foliis lanceolatis acute dentatis, caule fruticoſo.* Hard-ſeeded Chryſanthemum, with Spear-ſhaped Leaves acutely indented, and a ſhrubby Stalk.

This Plant grows naturally at the *Cape of Good Hope*, from whence I received the Seeds. It riſes with a ſhrubby Stalk Four or Five Feet high, dividing into many Branches towards the Top, which ſpread out flat on every Side; they have a purpliſh Bark, and are garniſhed with Spear-ſhaped Leaves, which have ſeveral acute Indentures on their Edges, repreſented at *a*; theſe are of a thick Conſiſtence, and ſucculent, ſtanding alternately on the Branches, having very ſhort Footſtalks, and are of a light green Colour; they are from Two to Three Inches long, and One Inch broad in the Middle, leſſening gradually to both Ends. The Flowers ſtand ſingle upon long Footſtalks, which ariſe from the Wings of the Leaves, and have a few very ſmall Leaves growing alternately their whole Length; and at the Top comes out the Flower, which appears cloſed, as is repreſented at *b*, in a ſingle hemiſpherical Empalement, compoſed of many ſmall Awl-ſhaped Leaves. The Flower is radiated, the Border being compoſed of ſeveral female Half-Florets, repreſented at *c*, which ſpread open, and are fruitful. The Center of the Flower is compoſed of hermaphrodite Florets, repreſented at *d*, which are tubulous, and indented at the Top in Five Parts, but theſe are barren. The female Half-Florets have a globular Germen, which afterward turns to an oval Berry, repreſented at *e*, which is firſt green, then red, but, when fully ripe, of dark purple Colour, having a thin Pulp, which covers One hard Seed, repreſented at *f* and *g*; the latter being of the natural Size, but the former is a little magnified.

This Plant approaches near to the *Oſteoſpermum fruteſcens, ſubrotundis foliis, ad oras dentibus rubris notatis, Burm. Plant. African. p.* 169. but the Leaves of this are ſhorter, rounder, and more indented on their Edges, and have longer Footſtalks. The Flowers have a much greater Number of Rays, which are ſhorter and more obtuſe than thoſe of our Plant; ſo that we may pronounce it a diſtinct Species.

The Plant here figured continues in flower great Part of the Year; and thoſe Flowers which appear early in the Spring, are frequently ſucceeded by Fruit which ripens in the Autumn.

OTHONNA, *Lin. Gen. Plant.* 888. *Jacobæa, Hort. Amſt. Jacobæaſtrum, Vaill. Act. R. Par.* 1720. Baſtard Ragwort.

This Genus of Plants is ranged by Doctor *Linnæus* in the ſame Section and Claſs with the former.

The Species here repreſented is,

Fig. 2. OTHONNA *foliis pinnatifidis, laciniis linearibus parallelis, Hort. Cliff.* 419. Othonna with Wing-pointed Leaves, whoſe Segments are narrow and parallel. This is the *Jacobæa Africana fruteſcens, foliis abſinthii umbelliferi incanis Hort. Amſt.* 2. *p.* 137. Shrubby *African* Ragwort, with hoary Leaves like the umbellated Wormwood.

This Sort riſes with a ſhrubby Stalk from Two to Three Feet high, ſending out ſeveral Branches toward the Top, which are cloſely garniſhed with hoary Leaves ſtanding without Order. They are cut into many narrow Segments almoſt to the Midrib, and theſe are indented at the Top, as is repreſented at *a*. The Flowers ſtand upon long naked Footſtalks, which ariſe from the End of the Branches; theſe have an Empalement of One Leaf, divided into Eight or Ten Segments, which are obtuſe at their Baſe, but end in acute Points, repreſented at *c*. The Flower is compoſed of ſeveral female Half-Florets in the Border; and the Diſk or Middle is made up of hermaphrodite Florets, repreſented at *b*. The female Half-Florets, or Rays, are indented at their Ends in Three Parts; they are of a bright yellow Colour, and are ſucceeded by Seeds; but the hermaphrodite Flowers in the Center are barren. This Plant flowers in *March*, *April*, and *May*; but theſe are not ſucceeded by Seeds in *England*. It is a very ornamental Plant in the Green-houſe; for its ſilvery Leaves continuing all the Year, make a very fine Variety when intermixed with other foreign Plants; and as theſe produce their Flowers early in the Spring, ſo at that Seaſon they are beautiful.

PLATE CXCV.

OXALIS, *Lin. Sp. Plant.* 515. *Oxys, Tourn. Inſt. R. H.* 88. *Tab.* 19. *Trifolium acetoſum, Raii Meth. Plant.* 86. Wood Sorrel; in *French*, *Alleuia*.

THIS Genus of Plants is ranged in the Fifth Section of *Linnæus*'s Tenth Claſs, which includes the Plants whoſe Flowers have Ten Stamina and Five Styles. *Tournefort* places it in the Third Section of his Firſt Claſs, which contains the Herbs with a Bell-ſhaped Flower of One Leaf, whoſe Pointal turns to a dry Fruit or Head, with ſeveral Capſules. Mr. *Ray* ranges it in his Nineteenth Claſs, where he places the Herbs with a Flower of One Petal, which is ſucceeded by a Fruit with many Cells.

The Species here repreſented are,

Fig. 1. OXALIS *ſcapo umbellifero, foliis ternatis bipartitis Lin. Sp. Plant.* 434. Wood Sorrel with an umbelliferous Stalk, and trifoliate Leaves divided into Two Parts. This is the *Oxys Africana bulboſa, floribus amplis luteis, foliis minimis hirſutis, Raii Hiſt.*

This Plant grows naturally at the *Cape of Good Hope*, from whence the Roots were ſent me. It hath a ſmall bulbous Root, covered with a purpliſh Skin, from which come out ſeveral trifoliate Leaves upon very long Footſtalks; theſe are ſmall, hairy, and indented at their Ends in Two Parts, as is repreſented at *a*, of a bright green Colour. The Flowers ſtand upon very long Footſtalks, which divide at the Top into ſmaller, as is ſhewn at *b*; each of theſe ſmaller Footſtalks ſuſtain One bright yellow Flower, repreſented at *c*, which is cut into Five obtuſe Segments. In the Center of the Flower is ſituated the Germen, ſurrounded by Ten Stamina, as is ſhewn at *d*; theſe ariſe from the Side of the Column, as is repreſented at *e*. The Column is terminated by Five Styles, as is ſhewn at *f*; theſe are magnified, and at *g* they are repreſented of their natural Size. *h* ſhews the Five-cornered Capſule fully grown; and *i* is One cut through tranſverſely to ſhew the Five Cells; and at *k* are Two of the Seeds taken out of the Capſule. This Plant flowers in *February*, when it makes a fine Appearance.

Fig. 2. OXALIS *ſcapo unifloro, foliis ternatis, radice ſquamoſo-articulata, Hort. Cliff.* 175. Wood Sorrel with One Flower upon a Stalk, trifoliate Leaves, and a ſquamous jointed Root. This is the *Oxys flore albo, Tourn. Inſt. R. H.* 88. Wood Sorrel with a white Flower. *John Bauhin* titles it *Oxys ſive trifolium acidum, Hiſt.* 2. 387. Oxys, or Sower Trefoil. It is the *Trifolum acetoſum vulgare, flore lacteo, C. B. P.* 330. Common three-leaved Sorrel with a Milk-white Flower.

This Plant grows naturally in moiſt ſhady Woods in moſt Parts of *England*; and of late Years it has been cultivated in ſome Kitchen Gardens as a Sallad Herb, and is by many preferred to the common Sorrel, having a more agreeable acid Flavour; and the Leaves of this, being ſmall and tender, mix better with the ſmall Herbs of which Sallads are uſually compoſed in the Spring. It is a low Plant with trailing ſcaly-jointed Roots, as is repreſented at *a*, from which the Footſtalks of the Flowers immediately ariſe; and by this it may be eaſily diſtinguiſhed from the yellow *American* Wood Sorrel which is now commonly ſold for it in the Markets, though there is ſcarce any Acid ſo very improper to be ſubſtituted for it; for that riſes with branching Stalks Four or Five Inches high, whereas every Leaf of this ſtands upon a ſeparate Footſtalk ariſing from the Root; as do alſo the Flowers which come out early in the Spring, before the Leaves are grown to their full Size. Theſe are commonly white, but often vary to a bluſh Colour within, and have ſome purpliſh Stripes on the Outſide, as is repreſented at *b*. Theſe are ſucceeded by pyramidal Five-cornered Capſules, repreſented at *d*, which have Five Cells, as is ſhewn at *c*; theſe are filled with ſmall oval Seeds, as is ſhewn at *e*. When the Seeds are ripe, the Capſules, on being touched, ſpring open with an Elaſticity, and caſt out Seeds to a conſiderable Diſtance. The Leaves of this Plant are uſed in Medicine.

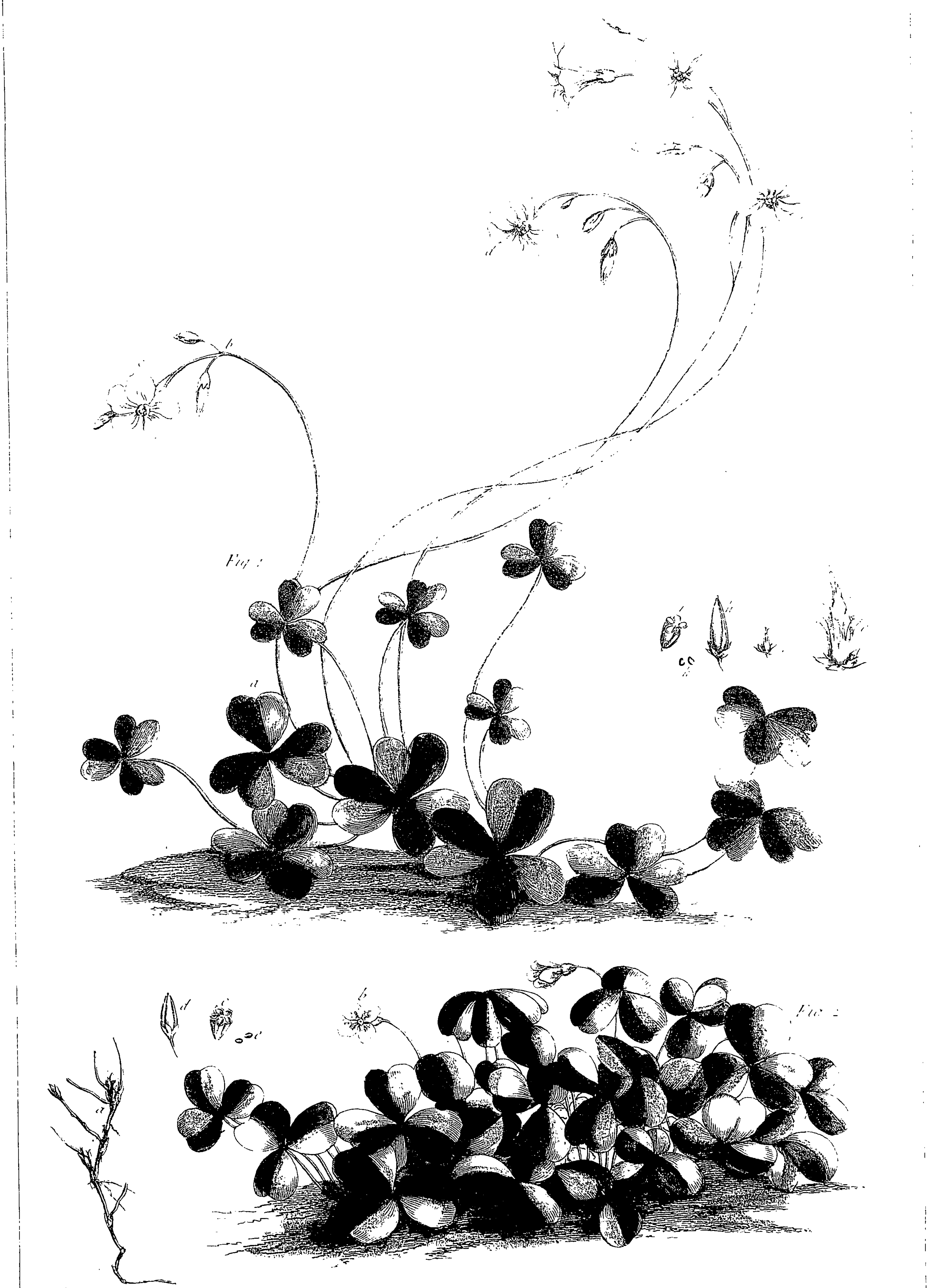


Fig. 1. OXALIS ſcapo umbellifero, foliis ternatis bipartitis. Lin: Sp: plant. 434.
Fig. 2. OXALIS ſcapo unifloro, foliis ternatis, radice ſquamoſo-articulata. Hort: Cliff: 175.

R. Lancake delin.

Mynde sc.

Publish'd according to Act of Parliament by P. Miller, November 30, 1757.

PLATE CXCVI.

PADUS, *Theoph. Lin. Gen. Pl. ed. prim. Ceraſus, Tourn. Inſt. R. H.* 625. *Tab.* 401. *Padus, Raii Meth. Plant.* 150. *Prunus, Lin. Gen. ed.* 5. The Bird Cherry, *vulgo*; in *French, Bois de Sainte Luicie.*

THIS Genus of Plants is by *Tournefort* joined to the Cherry, and is placed in the Seventh Section of his Twenty-firſt Claſs, which contains the Trees and Shrubs with a Roſe-ſhaped Flower, whoſe Pointal turns to a Fruit incloſing a Stone. Mr. *Ray* ranges it among the Trees with a moiſt Fruit incloſing a Stone, which grow in long Bunches. Doctor *Linnæus*, in the laſt Edition of his *Genera Plantarum*, and in his *Species Plantarum*, has joined the Plants of this Genus to the Plumbs, as he alſo has all the Species of Cherry. But as the Fruit of theſe and the Cherries are remarkably different in their Shape from the Plumb, and neither of theſe will grow when grafted or budded upon Stocks of the other Sorts, ſo there appears a natural Separation between the Plumb and the Cherry; and as the Flowers of this Genus are diſpoſed in long Bunches or Spikes, ſo that is a very obvious Mark of Diſtinction from the Cherry, which ſhould not be be omitted.

The Species here repreſented are,

Fig. 1. PADUS *foliis oblongo-ovatis, ſempervirentibus eglanduloſis*; Padus with oblong-oval evergreen Leaves, which have no Glandules to their Footſtalks. This is the *Lauro-ceraſus Luſitanica minor Azarero Luſitanorum. Tourn. Inſt. R. H.* 628. Small *Portugal* Laurel, by the *Portugueze* called *Azarero.* In the *Hortus Cliffortianus* it is titled, *Padus foliis ſempervirentibus ovatis, p.* 185. and in the *Hortus Upſalienſis, Padus foliis glandula deſtitutis, p.* 126. Padus with Leaves having no Glandules. In the *Species Plantarum* it is titled, *Prunus floribus racemoſis, foliis ſempervirentibus eglanduloſis, p.* 473. Plumb-tree with Flowers in long Bunches, and evergreen Leaves without Glandules. It is commonly known among the Gardeners by the Title of *Portugal Laurel* or *Cherry.*

This Tree is ſuppoſed to grow naturally in *Portugal*; but I rather believe it has been imported from ſome other Country, for it is rarely found there but in Gardens. It riſes with a ſtrong Tree-like Stem to the Height of Twenty Feet or more, ſending out many Branches on every Side, which have a ſhining purpliſh Bark, and are garniſhed with ſtrong evergreen Leaves ſtanding upon ſhort Footſtalks. They are of a lucid Green, about Three Inches long, and an Inch and half broad in the Middle; they are ſometimes ſlightly ſawed on their Edges, but generally they are entire. The Flowers are produced in long Spikes, as is repreſented at *a*; they are compoſed of Five roundiſh Petals, which expand in Form of a Roſe, repreſented at *b*; within theſe are ſituated about Twenty Stamina, which are half the Length of the Petals, and terminated by obtuſe Stamina, as is repreſented at *d*; theſe ſtand about an oval Germen, which ſupports a Style the Length of the Stamina, crowned by a roundiſh Stigma. The Germen afterwards turns to a roundiſh pulpy Berry, repreſented at *e*, which when ripe is of a dark purple Colour, incloſing an oval Stone, repreſented at *f*, in which there is incloſed a Kernel of the ſame Shape.

This Plant flowers in *June*, and the Berries ripen in *October*, which ſhould be gathered as ſoon as they are ripe, otherwiſe the Birds will devour them.

This is one of the moſt beautiful Evergreen Trees which we have in the *Engliſh* Gardens, eſpecially when it is planted in a looſe moiſt Soil, where it riſes with a very thick Stem; the Branches are covered with a bright purple Bark, which, together with the ſhining green Leaves, make a fine Appearance; and when the long Spikes of white Flowers are thruſt out from the Branches, they greatly add to its Beauty; and as it is very hardy, being very rarely injured by the ſevereſt Cold of our Winters, ſo there is not any Tree which better deſerves our Care to propagate.

Fig. 2. PADUS *foliis lanceolato-ovatis deciduus, petiolis biglanduloſis*; Padus with Spear-ſhaped oval Leaves which fall off in Autumn, whoſe Footſtalks have Two Glandules. This is the *Ceraſus racemoſus ſylveſtris, fructu non eduli rubro, H. R. Par.* Wild Cherry whoſe Flowers are diſpoſed in long Branches, and a red Fruit not eatable: And the *Ceracia racemoſa rubra, Tab. Icon.* 987. Red racemous Cherry, commonly called *Corriſh Cherry* in the Gardens.

This has been generally confounded with the Common Bird Cherry; but moſt of the late Writers on Botany have ſuppoſed they were the ſame, differing only in Culture; but I have raiſed both Species from Seeds, and have always found the young Plants keep the Difference of the Parent Plants.

It riſes with an upright Stem to the Height of Eighteen or Twenty Feet, ſending out Branches on every Side at the Top, which form a regular Head; whereas the Common Bird Cherry riſes with ſeveral Stems, the Branches grow diffuſed, and cannot be regularly trained. The Leaves of this are more of an oval Shape, and not ſo rough as thoſe of the other; the Spikes of the Flowers are ſhorter, and the Flowers ſtand much cloſer in the Bunches; the Petals of the Flower are rounder, as is repreſented at *a*, and the Fruit is much larger, as is ſhewn at *b*. Theſe are not ſo greedily devoured by the Birds as thoſe of the common Sort, which do ſeldom remain on the Trees to be perfectly ripe.

This is raiſed in the Nurſeries, and ſold as a flowering Shrub for Ornament, and is much preferable to the common Sort, becauſe it grows regular, and does not intermix its Branches with the neighbouring Trees. It flowers in *May*, and the Fruit ripens in *Auguſt.*

PLATE CXCVII.

Pancratium, *Lin. Gen. Plant.* 365. *Narciſſus*, *Tourn. Inſt. R. H.* 353. *Tab.* 185. *Raii Meth. Plant.* 116. Sea Daffodil.

THIS Genus of Plants is ranged in the firſt Section of *Linnæus*'s Sixth Claſs, which includes thoſe Plants whoſe Flowers have Six Stamina and One Style. *Tournefort* places it in the Second Section of his Ninth Claſs, which includes the Herbs with a Lilly Flower of One Leaf cut into Six Segments, whoſe Empalement turns to a Fruit. Mr. *Ray* ranges it in his Twenty-third Claſs, which contains the bulbous-rooted Plants whoſe Flowers ſit on the Top of the Fruit.

The Species here repreſented is,

Pancratium *ſpatha multiflora, petalis planis, foliis lingulatis*, *Lin. Sp. Plant* 291. Sea Daffodil whoſe Spatha or Sheath incloſes many Flowers with plain Petals, and Leaves which are Tongue-ſhaped. This is the *Narciſſus maritimus*, *C. B. P.* 34 Sea Daffodil. *Cluſius* titles it, *Hemerocallis Valentina*, *Hiſt. Sp.* 167. and *John Bauhin*, *Pancratium Monſpeſulanium, multis*; *Scilla alba parva*, *Hiſt.* 2. 611. *Montpelier* Sea Daffodil; and by ſome, Small White Squill.

This Plant hath a large oblong bulbous Root, reſembling that of the Squill, but ſmaller, covered with a brown Skin, and within white, compoſed of ſeveral Coats like thoſe of the Onion, which are pellucid and gently ſtriped, viſcid, and full of a clammy Juice, bitter to the Taſte without Acrimony; from theſe ariſe Seven or Eight Leaves (in full-grown Roots) which are Twelve or Fourteen Inches long, flat, of a gray Colour, and rounded at their Ends; between theſe ariſe a ſtrong Flower-ſtalk a Foot and an half high, naked to the Top, where in a membraneous Sheath are incloſed many Flowers. This Sheath divides into Two Parts, which turn backward to let out the Flower-buds. The Flowers are of One Leaf, cut into Six Spear-ſhaped Segments almoſt to the Bottom, as is repreſented at *a*, ſo as to appear like ſo many diſtinct Petals; but they are joined together at their Baſe. In the Center there is a cylindrical Nectarium of One Leaf, which is cut into Ten Segments at the Top, which ſpread open, in which are inſerted the Six long Stamina, which lie incumbent on the Segments of the Petal, and are terminated by decumbent riſing Summits, repreſented at *c c*. The Germen is ſituated under the Flower, as is ſhewn at *b*, from the Top of which ariſes the Style *d*, which is crowned by a ſmall oval Stigma; the Germen *e* afterwards turns to a roundiſh Three-cornered Capſule, with Three Cells filled with large black Seeds. This Plant grows on the Sea Shore in the South of *France*, *Spain*, and *Italy*.

There are ſome Species of this Genus which are Natives of *America*, whoſe Germen or Receptacle turns to Bulbs, as is repreſented at *f*; and others with an oval fleſhy Capſule, as is ſhewn at *g*, which include ſmall Seeds, ſhewn at *h*.

PLATE CXCVIII.

Pavia, *Boerh. Ind. alt.* 2. *p.* 260. *Eſclus*, *Lin. Gen. Plant.* 440. The Scarlet Horſe-cheſnut.

THIS Plant is joined to the common Horſe-cheſnut by Doctor *Linnæus*, who ranges it in the Firſt Section of his Seventh Claſs, which includes thoſe Plants whoſe Flowers have Seven Stamina and One Style. This was ſeparated by Doctor *Boerhaave* from the Horſe-cheſnut, becauſe the Flower is contracted like a Beak, and the Cover of the Fruit is not prickly. There is but this One Species at preſent known.

Pavia, *Boerh. Ind. alt.* 2. *p.* 260. Scarlet Horſe-cheſnut. This is the *Saamouna Piſonis ſiliquifera Braſilienſis arbor, digitatis foliis ſerratis, floribus Teucrii purpureis*, *Pluk. Alm.* 326. Doctor *Linnæus* titles it, *Æſculus floribus octandris*, *Sp. Plant.* 344. Eſculus with Flowers having Five Stamina.

This Tree grows naturally in *Brazil* and *Carolina*, where it riſes with a woody Stalk Eight or Ten Feet high, covered with a ſmooth Bark, and divides into ſeveral Branches, which are garniſhed with Hand-ſhaped Leaves, compoſed of Five Spear-ſhaped Lobes which unite at their Baſe, where they join the Footſtalk. They are ſawed on their Edges, are of a light Green, and are placed oppoſite on the Branches, ſtanding upon long Footſtalks. The Flowers are produced from the End of the Branches upon long naked Footſtalks, each ſuſtaining Four or Five Flowers, theſe are tubulous, as is repreſented at *a* and *b*, opening a little at the Top, where the Stamina peep out, as is ſhewn at *c c*, which are terminated by roundiſh Summits; theſe are ſometimes Seven, and at others Eight, in Number. In the Middle of the Stamina ariſes the Style *d*, which is much longer than the Stamina; the Flowers are of a bright red Colour, and appear in *June*; theſe are ſometimes ſucceeded by Fruit in *England*, which rarely ripen here.

When this is grafted or budded upon the common Horſe-cheſnut (which is the moſt common Method of propagating the Trees here) they grow to a greater Height than upon their own Roots; but as the Graft never keeps pace in Growth with the Stock, ſo they appear unſightly, and are frequently blown out by ſtrong Winds where they are expoſed.

PLATE CXCIX.

PÆONIA, *Tourn. Inſt. R. H.* 273. *Tab.* 146. *Raii Meth. Plant.* 77. *Lin. Gen. Plant.* 600. Piony; in *French*, Pivoine.

THIS Genus of Plants is ranged in the Sixth Section of *Tournefort*'s Sixth Claſs, which includes the Herbs with a Roſe flower, whoſe Pointal afterward turns to a Fruit compoſed of ſeveral Capſules. Mr. *Ray* places it in the Second Section of his Eighteenth Claſs, which contains the Herbs with many Pods and regular Flowers, whoſe Leaves are narrow and leſs ſucculent. Dr. *Linnæus* ranges it in the Second Section of his Thirteenth Claſs, which includes the Plants whoſe Flowers have many Stamina and Two Styles. The Characters of the Genus are exhibited in the *Gardeners Dictionary.*

The Species here repreſented is,

PÆONIA *foliis difformiter lobatis pubeſcentibus.* Piony with difform lobated Leaves, which are downy.

Of this there are Two Varieties, one with a ſingle nd the other with a double Flower. The Seeds of this ort were brought from the *Levant*; and both the ſingle and double Flowers were produced from the ſame Seeds. The Roots of this are compoſed of a great Number of oblong fleſhy Tubers, which are joined to the Crown of the Root by ſmall Strings of the ſame Colour with the Tubers. The Leaves are very irregular in their Form, ſome being compoſed of Eleven, and others of Thirteen Lobes. The Footſtalk ſeparates into Three Diviſions, as is repreſented at *a*: The Two Side Diviſions next the Stalk are, for the moſt Part, compoſed of Three Lobes; but the middle one, which is extended in Length, is commonly compoſed of Seven Lobes, as is ſhewn at *b*. Theſe Lobes are narrow, ſmooth, and intire on their Edges: They are ſmaller than thoſe of the common Sort, and are covered with a ſoft hairy Down. The Stalks do not riſe ſo high as thoſe of the common Piony, ſeldom being more than a Foot and a Half long: They are terminated by One Flower, of a bright red Colour, as is repreſented at *c*. Theſe are ſmaller, and leſs double, than thoſe of the common Piony; and have generally Three, ſometimes Four, and at others Five, Germina in their Center: Theſe afterwards turn to ſo many downy oblong Capſules, repreſented at *d*; Two or Three of which are much larger than the reſt: Theſe open longitudinally, as is ſhewn at *e*, diſplaying Two Rows of ſhining black Seeds, which adhere to a deep-red fleſhy Placenta. The Seeds are oval, terminating in a Point at the End, which is faſtened to the Placenta, as is repreſented at *e*.

The Flowers appear in *June*, and the Seeds ripen in *September*. This Sort is not ſo hardy as the common Piony, nor do the Roots increaſe ſo faſt.

PLATE CC.

PENTAPETES, *Lin. Gen. Plant.* 757. *Pterospermadendron, Amm. Ruth.* Scarlet Ketmia vulgo.

THIS Genus of Plants is ranged in the Third Section of *Linnæus*'s Sixteenth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina joined in One Body. The Characters of this Genus are exhibited in the *Gardeners Dictionary.*

The Species here repreſented is,

PENTAPETES *foliis haſtato-lanceolatis ſerratis, Lin. Sp. Plant.* 698. Pentapetes with Arrow Spear-ſhaped ſawed Leaves. This is the *Blattaria Ceylanica, flore amplo coccineo, Hort. Amſt.* 1. *Tab.* 6. Moth Mullein of *Ceylon* with a large ſcarlet Flower. Mr. *Ray* titles it *Alcea Indica, lucido haſtato folio, flore Blattariæ Phœnicio, Hiſt. Supp.* 523. *Indian* Vervain Mallow with a ſhining Arrow-ſhaped Leaf, and a ſcarlet Flower like the Moth Mullein. Dr. *Plukenett* has given a very bad Figure of this Plant in his *Phytographia, Tab.* 126. *f.* 4. by the Title of *Alcea fruticoſa, pentaphylloides æmula, floribus amœniſſime rubellis, calyce producto.* Shrubby Vervian Mallow, emulating the Baſtard Cinquefoil, with a beautiful red Flower, and the Empalement ſtretched out.

The Figure of this Plant, which is engraven in the Firſt Volume of the *Amſterdam Garden*, is far beyond Nature: The Leaves of the Plant are near twice the Size of thoſe of the moſt vigorous Plant I have yet ſeen, and the Indentures on the Edges are much deeper than they ever appear in Nature; but yet we may be aſſured of that being intended for the Plant here exhibited. Indeed, many of the Figures in that Volume do greatly exceed the Plants, when growing in their native Soil. The Figure of this Plant, in *Plukenett*'s *Phytographia*, is, on the contrary, as much too ſmall; and the Leaves of the Plant are not a Third Part ſo long as they are in Nature. That which is here exhibited is as true a Repreſentation of the Plant as can be given.

It grows naturally in *India*, from whence I have ſeveral times received the Seeds. This is an annual Plant, with an upright Stalk, from Two to Three Feet high, ſending out ſeveral Side Branches from the lower Part of the Stalk: Theſe are garniſhed with ſhining green Leaves, ſome of which are cut into Three Parts toward their Baſe; the Two Side Segments being ſhort, and acute-pointed: The middle one is extended to a great Length beyond them; ſo that theſe Leaves are formed like Points of Arrows, or thoſe of Halberts: Others have no Jags on their Sides, but are oblong and Spear-ſhaped: They are ſome of them ſlightly ſawed on their Edges, and their Surface a little rough, ſtanding alternate on the Branches: Their under Surface is of a pale green, and a little hairy. From the Wings of the Stalk come out the Flowers: Sometimes there are Two ariſing from the ſame Footſtalk of the Leaf; but in general they are ſingle, each ſtanding upon a diſtinct Footſtalk. The Empalement of the Flower is of One Leaf, cut at the Top into Five acute Segments, which are extended almoſt the Length of the Petals, and ſpread open every Way. The Flower has but One Petal, which is cut into Five obtuſe Segments, repreſented at *a*: Theſe are divided almoſt to the Bottom; but as they are joined at their Baſe, and fall off without ſeparating, ſo it is called a Flower of One Petal. There are Fifteen ſhort Stamina ſituated in the Bloſſom of the Flower, which are narrow, and are terminated by oblong erect yellow Summits; and between theſe ariſe Five large red Stamina, which are barren, repreſented at *b*; one of theſe riſing between every Three of the ſhort Stamina, as is ſhewn at *d*, where there are Two of the barren Stamina repreſented, with the Three ſhort ones between, in the Manner they are connected together. Between theſe ariſe a ſingle Style, which is longer than the coloured Stamina, crowned with a thick Stigma, as is repreſented at *c*. The Germen, which is ſituated in the Center of the Flower, afterward turns to a roundiſh Capſule, which is ſhewn at *e*, ſitting in the Empalement of the Flower: This is divided into Five Cells, as is repreſented by *f* and *g*, which opens into Two Valves; each Cell containing Two Rows of oblong Seeds, which are narrowed at their Baſe, repreſented at *h*.

This Plant muſt be raiſed on a Hotbed, and brought forward in the Spring, otherwiſe it will not perfect Seeds here; and, when it is ſo managed, it will flower in *July*, and there will be a Succeſſion of theſe Flowers till Autumn: But thoſe Flowers only will be ſucceeded by good Seeds, which flower early in the Summer.

PLATE CCI.

PERSICARIA, *Tourn. Inſt. R. H.* 509. *Tab.* 290. *Raii Meth. Plant.* 71. *Polygonum, Lin. Gen. Plant.* 445. Arſmart; in *French*, Perſicaire.

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Fifteenth Claſs, which includes the Herbs with a ſtamineous Flower, whoſe Pointal turns to a Seed wrapped up in the Empalement. Mr. *Ray* places it in the Second Section of his Fifth Claſs, which contains the Herbs with ſtamineous Flowers, which are joined to the Fruit. Dr. *Linnæus* has joined this Genus, with the *Biſtorta* and *Fagopyrum* of *Tournefort*, to the *Polygonum*; which he ranges in the Third Section of his Eighth Claſs, which includes thoſe Plants whoſe Flowers have Eight Stamina and Three Styles.

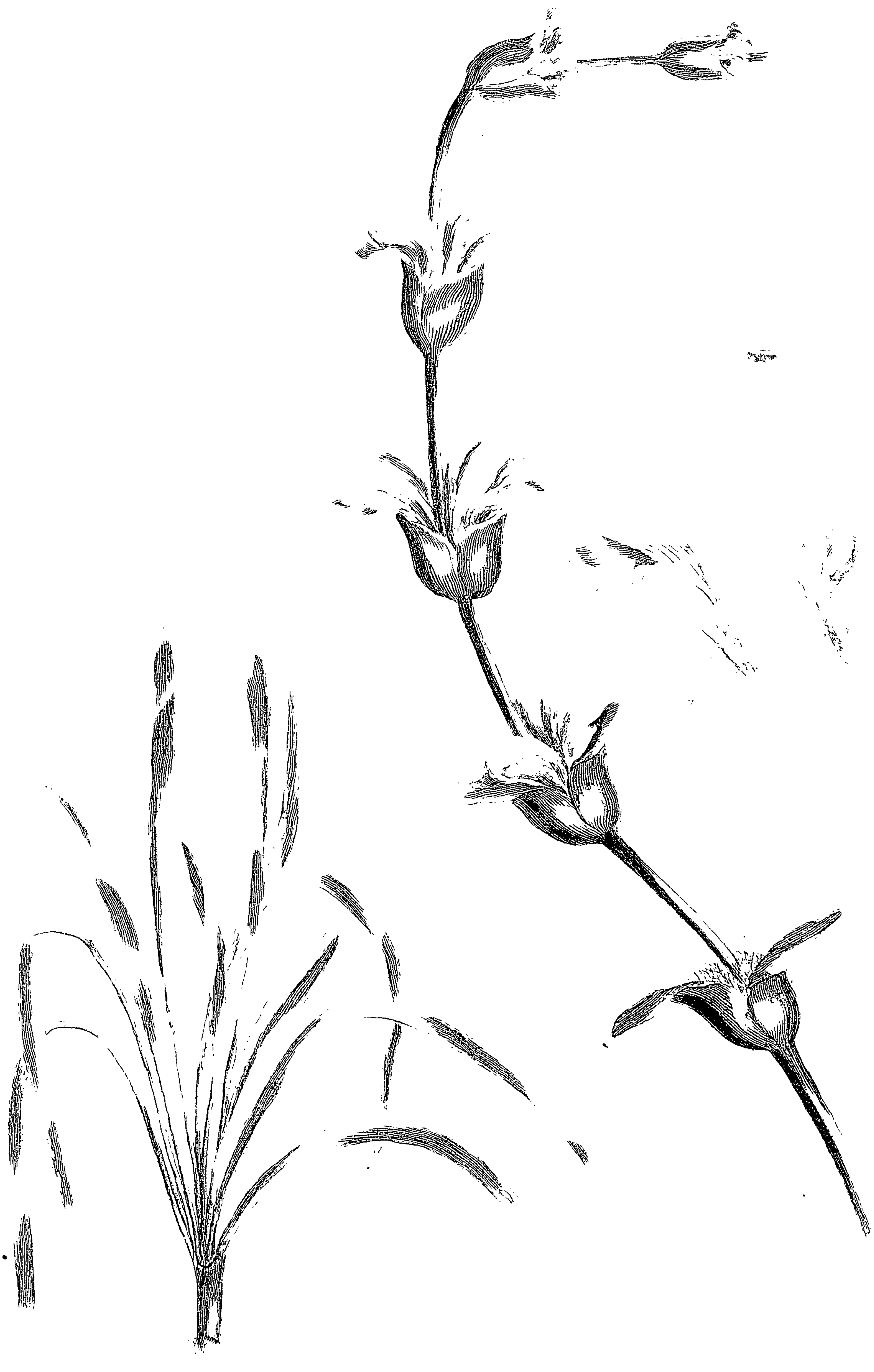
The Species here repreſented is,

PERSICARIA *foliis ovato-lanceolatis acutis, floribus pentandris, caule erecto.* Arſmart with oval ſpear-ſhaped acute-pointed Leaves, Flowers with Five Styles, and an erect Stalk. This is the *Perſicaria Orientalis, nicotianæ folio, calyce florum purpureo, Tourn. Cor.* 38. Eaſtern Arſmart with a Tobacco Leaf and a purple Empalement to the Flower. Dr. *Linnæus* titles it *Polygonum floribus heptandris digynis, foliis ovatis, caule erecto, ſtipulis hirtis, Sp. Plant.* 362. Knot-graſs whoſe Flowers have Seven Stamina and Two Styles, with oval Leaves, an erect Stalk, and hairy Stipulæ. And in the Catalogue of *Clifford's* Garden, he titles it *Perſicaria florum ſtaminibus ſex pluribuſque, ſtylo duplici*, 42. Arſmart with Six and more Stamina in the Flower, and a double Style.

The Seeds of this Plant were firſt ſent to *Europe* by Dr. *Tournefort*, who ſaw it firſt growing in the Prince of *Teflis's* Garden in *Georgia*, and afterwards in the Garden of the Monks of the Three Churches near Mount *Ararat*; but he could not learn where it grew naturally. They cultivate this Plant in the Gardens of *Georgia* and *Armenia*, not only for the Beauty of its Flowers, but alſo for the Virtues with which the Plant is poſſeſſed; which are nearly the ſame with thoſe attributed to the common Arſmart of *Europe*.

The Root of this Plant is compoſed of many ſtrong Fibres, which grow in Tufts, and extend to a great Length from the Center. The Stalk is joined in the ſame Manner as thoſe of the common Sort: It riſes Eight or Ten Feet high: The lower Part of the Stalk becomes ligneous, and as thick as an ordinary Walking-Cane, of a fine green, and a little hairy. The Leaves come out alternately at the Joints, which are often a Foot long, and Six Inches broad in the Middle, leſſening toward each End, and terminating in acute Points: They have One ſtrong longitudinal Vein running thro' the Middle, and ſeveral tranſverſe Veins, which run upward toward the Point: Their Surfaces are a little hairy; the upper being of a bright green, and the under of a pale Colour. The Footſtalks of the Leaves are broad, and at their Baſe half embrace the Stalk. The Flowers are produced in Spikes at the Top of the Stalk, and the Ends of the Branches, in cloſe Spikes, which are Seven or Eight Inches long, hanging downward. The Flower has ſometimes Five, at others Six, and ſometimes Seven Stamina, terminated by ſmall Summits: Theſe are included in what ſome Botaniſts call an Empalement, and others a Petal, of One Leaf (for as theſe are coloured, ſo that is a Diſtinction made by ſome between the Petal and Empalement); but as the Flowers of this Species have a Two-leaved Empalement, repreſented at *a*, which ſoon falls off, ſo I ſhall chuſe to call the other a Petal. This is cut into Five Segments, as is repreſented at *b*; and between theſe are the Five Stamina, which ſpread open in the ſame manner as the Petals, as is ſhewn at *c*. In the Center of the Flower is ſituated the Germen, ſupporting a double Style, as is repreſented at *d*, crowned by obtuſe Stigma's, and ſurrounded by the Five Styles, which are inſerted in the Receptacle of the Flower, as is repreſented at *e*. The Germen afterward turns to an oval Seed, wrapped up in the Petal of the Flower, as is repreſented at *f*; and at *g* and *h* are Two Seeds ſhewn, taken out of their Covers. This Plant begins to ſhew its Flowers in *July*, and continues in Beauty till the Froſt puts a Stop to them; and ſoon after the Plant decays.

Pl. CCIII.



PHLOMIS [illegible] floribus ovatis, involucris setaceis lanatis. Lin. Sp. plant. 585.

R. [illegible] del. [illegible] Miller sculp.

[illegible] Miller Dec. 23. 1787

PLATE CCII.

PHLOMIS, *Tourn. Inſt. R. H.* 177. *Tab.* 82. *Raii Meth. Plant.* 58. *Lin. Gen. Plant.* 642. *Jeruſalem* Sage, or Mullein.

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Fourth Claſs, which includes the Herbs with a Lip flower of One Leaf, whoſe upper Lip is hooked, or Helmet ſhaped. Mr. *Ray* ranges it in the Firſt Section of his Fourteenth Claſs, which contains the Plants with whorled Flowers, which have perennial ſhrubby Stalks. Dr. *Linnæus* ranges it in the Firſt Section of his Fourteenth Claſs, which includes the Plants whoſe Flowers have Two long and Two ſhort Stamina.

The Species here repreſented is,

PHLOMIS *foliis oblongo-cordatis ſubtus tomentoſis, caule fruticoſo. Jeruſalem* Sage with Heart-ſhaped Leaves, which are woolly on their under Side, and a ſhrubby Stalk. This is the *Phlomis fruticoſa, flore purpureo, foliis rotundioribus, Tourn. Inſt. R. H.* 178. Shrubby *Jeruſalem* Sage with a purple Flower and rounder Leaves. Dr. *Plukenett* has given a ſmall imperfect Figure of this Plant, by the Title of *Salvia fruticoſa, ciſto folio haud incano, floribus purpureis, Phyt. tab.* 57. *f.* 6. Shrubby Sage with a Rock-roſe Leaf not hoary, and purple Flowers. *Caſpar Bauhin* titles it *Verbaſcum ſubrotundo ſalviæ folio, Pin.* 240. Mullein with a roundiſh Sage-Leaf.

This Plant grows naturally in *Spain* and *Portugal*: It riſes with ſeveral ſhrubby Stalks from Three to Four Feet high; the lower Parts of the Branches are covered with a ſoft Down, repreſented at *a*; and are garniſhed with oblong Heart-ſhaped Leaves, which are woolly on their under Side, repreſented at *b*. The upper Parts of the Stalks and Branches are leſs woolly, and the Leaves are longer and narrower than thoſe below: They are placed by Pairs, ſitting pretty cloſe to the Stalks; and at each Joint, cloſe to the Footſtalks of the Leaves, the Flowers come out in Whorles round the Stalks; as is ſhewn at *c*: Theſe have a tubulous Empalement of One Leaf, having Five acute Angles, and are cut at the Brim into Five acute Segments, repreſented at *d* and *e*. The Flower hath but One Petal, which is divided into Two Parts: The upper Part, which is called the *Galea*, or Helmet, is arched, ſtanding erect, as is ſhewn at *f* and *g*: The former repreſents the Backſide, and the latter the Front. This reſts at the Baſe upon the lower Lip or Beard, which is hollowed like a Spoon, and is indented in Three Parts, the middle one being longer than the Two Side Segments. The Flower has Four Stamina, Two of which are longer than the other, repreſented at *h*, *h*; the Two ſhorter are marked *i*, *i*: Theſe are in their natural Poſition, ſituated under the Helmet of the Flower, and are hooked in the like Manner: They are terminated by oblong Summits. In the Bottom of the Empalement is ſituated a Germen with Four Parts, ſupporting a ſlender Style, repreſented at *k*, and *l*; the former ſhews it incloſed in the Empalement, and the latter when taken out. The Style is terminated by an acute bifid Stigma. The Germen afterwards turns to Four oblong naked Seeds ſitting in the Empalement, One of which is repreſented at *m*; and *n* ſhews the Style reverſed, with the Germen at the Baſe.

This Shrub flowers in *June* and *July*, but the Seeds ſeldom ripen here.

PLATE CCIII.

PHLOMIS, *Tourn. Inſt.* 177. *Tab.* 82. *Lin. Gen. Plant.* 642. *Jeruſalem* Sage.

THIS being of the ſame Genus with the former Plate, I ſhall not repeat the Claſſes under which different Botaniſts have ranged it.

The Species here repreſented is,

PHLOMIS *foliis lanceolatis tomentoſis, floralibus ovatis, involucris ſetaceis lanatis, Lin. Sp. Plant.* 585. *Jeruſalem* Sage with woolly ſpear-ſhaped Leaves, but thoſe under the Flowers are oval, and briſtly downy Involucrums. This is the *Phlomis lychnitis, Cluſ. Hiſt.* 27. *Caſpar Bauhin* titles it *Verbaſcum anguſtis ſalviæ foliis, Pin.* 240. Mullein with narrow Sage-Leaves. And *Lobel* calls it *Verbaſcum ſylveſtre, foliis ſalviæ tenuifoliæ, Icon.* 558. Wild Mullein with narrow Sage-Leaves. *Sauvages*, in his *Flora Monſpelienſis*, titles it *Phlomis foliis lingulatis utrinque tomentoſis, radiis involucri ſetaceis villoſis, p.* 143. *Jeruſalem* Sage with ſmall Tongue-ſhaped Leaves woolly on every Side, and the Rays of the Involucrum briſtly and hairy.

This Plant grows naturally in the South of *France*, in *Spain*, and *Italy*. It hath a perennial Root, and an annual Stalk which decays every Autumn. From this Root the Leaves come out in Tufts, being inveloped at their Baſe by a common Covering: Theſe are long and ſlender, as is repreſented at *a*; and are ſoft, downy, and reflexed. By the Side of theſe comes out the Stalk, which is ſlender, and near Two Feet long, garniſhed with Two oval Leaves at each Joint, which embrace the Stalk with their Baſe, as is repreſented at *b*. The Whorles of Flowers are encompaſſed by theſe Leaves, within which is ſituated a radiated briſtly Involucrum, as is ſhewn at *c*: Theſe are repreſented taken out of the Leaves at *d* and *e*. *f*, and *g*, ſhew both Sides of the *Galea* or Helmet; *h*, repreſents the under Lip or Beard; and *i*, the Four Stamina, with their Summits; *k*, and *l*, the Style reverſed, with the Germen at their Baſe; and *m*, ſhews it in its natural Poſition.

This Plant flowers in *June* and *July*, but ſeldom produces good Seeds in *England*.

PLATE CCIV.

Phlomis, *Tourn. Inſt.* &c.

THIS is of the ſame Genus with the Two former Plates; but as I have never ſeen a Repreſentation of it in any of the Books of Botany, ſo we have repreſented it here.

The Species is,

Phlomis *foliis radicalibus cordatis, utrinque tomentoſis villoſis, Lin. Sp. Plant.* 585. *Jeruſalem* Sage whoſe lower Leaves are Heart-ſhaped, and woolly and hairy on both Sides. This is the *Phlomis orientalis, foliis auriculatis incanis, flore luteo. Niſſol.* Eaſtern *Jeruſalem* Sage with hoary-eared Leaves and a yellow Flower.

This Plant grows naturally in the *Levant*, and alſo in *Spain*, from whence the Seeds were ſent me. It hath a perennial Root, and an annual Stalk. The Leaves ariſe in Cluſters from the Root, as is ſhewn at *a*, ſtanding upon pretty long hairy Footſtalks: They are Heart-ſhaped, as is ſhewn at *b*, and woolly and hairy. The Stalks come out from the Side of the Leaves, and riſe near Two Feet high, dividing upward into Two or Three ſmall Branches: Theſe are garniſhed at each Joint by Two narrow Spear-ſhaped Leaves, repreſented at *c*. From the Bottom of the Leaves come out the Flowers, in ſmall Whorles, as is ſhewn at *d*. At *e*, is One of the Flowers taken from the Whorles; *f*, and *g*, ſhew the Two Sides of the *Galea* or Helmet; at *h*, are repreſented the Four hooked Stamina, with their Summits; at *i*, is ſhewn the Style ariſing from the Germen; *k*, repreſents the five-pointed Empalement.

This Plant flowers at the ſame time with the former, but ſeldom produces good Seeds in *England*.

PLATE CCV.

PHLOX, *Lin. Gen. Plant.* 197. *Lychnidea, Hort. Elth.* 203. *Tab.* 166. Baſtard Lychnis.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and One Style. According to Mr. *Ray*'s Syſtem it muſt be placed in the Firſt Section of his Nineteenth Claſs, which includes the Herbs with a regular Flower of One Petal, whoſe Seeds are incloſed in a Capſule.

The Characters of this Genus are,

The Empalement of the Flower is cylindrical, and cut into Five acute Segments at the Top, as repreſented at b: *This is permanent. The Flower is of the Salver Shape, with One Petal, having a long cylindrical Tube, which is narrow at the Bottom, and incurved; but the Top is divided into Five obtuſe equal Segments, which ſpread open, repreſented at* a: *It hath Five Stamina included in the Tube of the Petal, Three of which are longer than the other Two, as is ſhewn at* c: *Theſe are terminated by oblong proſtrate Summits: At the Bottom of the Tube is ſituated a conical Germen, ſupporting a ſlender Style, which is longer than the Stamina, crowned by a bifid acute Stigma, repreſented at* d: *The Germen afterward turns to an oval Capſule, ſhewn at* e, *which opens in Three Parts, as is repreſented at* f, *having Three Cells, each containing One oval Seed, repreſented at* g.

The Species here repreſented are,

Fig. 1. PHLOX *foliis lato-lanceolatis; inferioribus alternis, caule ramoſo, Lin. Sp. Plant.* 152. Phlox with broad Spear-ſhaped Leaves, whoſe lower are alternate, and a branching Stalk. This is the *Lychnidea Virginiana, alſines aquaticæ foliis, floribus ſummo caule brachiatis, ſive in ramulos divaricatis, Pluk. Mant.* 121. *Virginian* Baſtard Lychnis, with Leaves like Water Chickweed, and Flowers growing from the Diviſion of the Branches.

This Plant grows naturally in ſeveral Parts of *North America*, but particularly in *Virginia*. It has a perennial Root, and an annual Stalk, which decays in the Autumn. The Root is compoſed of many tender Fibres; which ſpread and increaſe in the Ground; from which ariſe ſeveral weak Stalks, about a Foot high; which are of a Purple Colour, and are garniſhed with ſmooth Spear-ſhaped Leaves, about Two Inches and a Half long, and Three Quarters of an Inch broad at their Baſe; ending in acute Points: Thoſe on the lower Part of the Stalk are placed alternate; but above they are oppoſite, ſitting cloſe to the Stalk. They are of a lucid Green, and turn backward. The Stalk divides toward the Top into ſeveral Branches, which are terminated by Flowers of a light blue Colour: They are Salver-ſhaped, and have very ſlender Tubes. The Segments of the Petal are large, obtuſe, and a little indented at their Points: Theſe are of a very thin Conſiſtence, ſo are not of long Duration. They appear in *May*, long before any of the other Species of this Genus: But this Sort does not produce Seeds in *England*.

Fig. 2. PHLOX *foliis lanceolatis margine ſcabris, corymbis compoſitis, Lin. Sp. Plant.* 151. Phlox with Spear-ſhaped Leaves having rough Borders, and a compound Corymbus of Flowers. This is the *Lynchnidea Virginiana, umbellata maxima, Lyſimachiæ luteæ foliis amplioribus, binis ex adverſo poſitis, Pluk. Mant.* 121. Greateſt umbellated *Virginian* Baſtard Lychnis, with large Leaves like the yellow Looſeſtrife, placed oppoſite.

This Plant is alſo a Native of *North America*, from whence it was brought into the *Engliſh* Gardens. The Root of this is perennial, compoſed of many ſtrong Fibres, which ſpread in the Ground, ſo progagate pretty freely. The Stalks riſe from Two to Three Feet high, according to the Soil in which they are planted: For, if they are in a rich moiſt Ground, or the Plants are duly watered in dry Weather, they will grow more than Three Feet high; but in dry or poor Ground they will not riſe above half that Height. Theſe are garniſhed with Spear-ſhaped Leaves, placed oppoſite at each Joint: They are from Three to Four Inches long, and One broad in the Middle: Their Edges are rough, and ſometimes the upper Surface of their Leaves have ſeveral ſmall rough Proturberances, and their Under-ſide is a little hairy. From the upper Part of the Stalk, immediately under the principal Corymbus of Flowers, come out Two ſmall Branches on each Side the Stalk, oppoſite, terminated by a ſmall Corymbus of Flowers. The Flowers are of a light purple Colour, and appear in *July*, when they make a fine Appearance in the Borders of the Pleaſure-Garden: If the Seaſon is not very hot and dry, the Flowers will continue in Beauty a Month, and are ſometimes ſucceeded by Seeds in *England*.

PLATE CCVI.

PHYSALIS, *Lin. Gen. Plant.* 223. *Alkekengi, Tourn. Inſt. R. H.* 151. *Tab.* 64. *Alkekengi ſeu Solani halicacabi, Raii Meth. Plant.* 74. Winter Cherry; in *French, Coqueret.*

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and One Style. *Tournefort* ranges it in the Seventh Section of his Second Claſs, which includes the Herbs with a Wheel-ſhaped Flower of One Leaf, whoſe Pointal becomes a ſoft Fruit. Mr. *Ray* ranges it in the Third Section of his Seventeenth Claſs, where he places the Berry-bearing Herbs, growing ſparſedly. The Title of *Alkekengi*, which has generally been applied to this Genus, being barbarous, Dr. *Linnæus* has altered to *Phyſalis*, which ſignifies a Bladder, the Fruit of this being always included in a Bladder.

The Characters of the Genus are,

The Empalement of the Flower a, *is of one Leaf, ſwelling like a Bladder, cut into Five acute Segments at the Top, and is permanent: The Flower has One Petal, which is*

Wheel-ſhaped, with a very ſhort Tube, repreſented at b; *which is five-cornered, and ſpread open at the Top, as is ſhewn at* c: *It hath Five ſmall Awl-ſhaped Stamina, which ſtand near each other, terminated by erect Summits, as is repreſented at* d: *At the Bottom of the Tube is ſituated a roundiſh Germen, ſhewn at* e, *ſupporting a ſlender Style,* f, *which is longer than the Stamina, crowned by an obtuſe Stigma: The Germen afterward turns to an almoſt globular Fruit,* g, *ſitting in the Empalement, having Two Cells, filled with Kidney-ſhaped Seeds.*

The Species here repreſented are,

Fig. 1. PHYSALIS *caule herbaceo ramoſo, foliis ovato-lanceolatis acute dentatis.* Winter Cherry, with a branching herbaceous Stalk, and Spear-ſhaped Leaves, which are ſharply indented.

The Seeds of this Plant were ſent me from *Philadelphia* by Dr. *Benſel*, who found it growing naturally there; and as it is different from all the Species of this Genus which have been deſcribed in Books, I have exhibited a Figure of it here. It hath a perennial Root, compoſed of ſtrong Fibres: The Stalk is hairy, and branches out on every Side almoſt from the Ground: The Leaves are hairy, of a pale Green; about Two Inches and a Half long, and One and a Half broad in the Middle, ending in acute Points, and have ſeveral acute Indentures on their Borders; their Footſtalks are about an Inch long, and ſtand alternate on the Branches: The Flowers come out from the Side of the Branches between the Leaves; their Footſtalks are ſlender, and about an Inch long: The Empalement of the Flower is deeply cut into Five acute Segments. The Tube of the Flower is ſhort, and much broader than in moſt of the other Species. The Petal expands flat, juſt above the Empalement: It is large, of a Sulphur Colour, with a purple Bottom: It has ſeveral ſlight Indentures on the Edge, which are obtuſe. The Flowers appear in *July*; and are ſucceeded by oval Berries, included in an oval-pointed Bladder: Theſe are of a pale yellow Colour when ripe, and have many Kidney-ſhaped Seeds, included in a ſoft Pulp. The Root of this Sort does not creep in the Ground, like that of the Common Winter Cherry, and ſome other Species of this Genus.

Fig. 2. PHYSALIS *foliis ovato-lanceolatis integerrimis oppoſitis, caule fruticoſo.* Phyſalis, with entire oval Spear-ſhaped Leaves, placed oppoſite, and a ſhrubby Stalk. This is the *Alkekengi Americanum, arboreſcens; fructu ſphærico rubro, veſica atropurpureâ, Houſt. MSS.* Tree *American* Winter Cherry, with a ſpherical red Fruit, having a dark purple Bladder.

This Plant was diſcovered by the late Dr. *Wm. Houſtoun*, at *Campeachy*; from whence he ſent the Seeds to *England*, which ſucceeded in ſeveral Gardens. This riſes with a ſhrubby Stalk Ten or Twelve Feet high; dividing toward the Top into ſeveral ſmall Branches, covered with a grey Bark, and a little hairy. Theſe are garniſhed with oval Spear-ſhaped Leaves, which, on the lower Part, are placed alternate, but toward the upper Part they are oppoſite. The lower Leaves are from Three to Four Inches long, and Two Broad in the Middle, leſſening toward both Ends, ending in acute Points: Theſe have Footſtalks, near Two Inches long; which have Borders or Wings, formed by Part of the Leaves running along them. The upper Leaves are much ſmaller, but of the ſame Form, and are entire: They are of a pale Green, and are hairy. The Flower comes out from the Wings of the Leaves, toward the End of the Branches: Sometimes they are ſingle; but moſt commonly there are Two coming from the ſame Joint, one on each Side the Stalk, ſtanding upon ſhort ſlender Footſtalks: They have very ſmall Empalements, which are cut into Five Segments, repreſented at *a*. The Flowers are ſmall: The Petal is cut deeply into Five Segments, which are reflexed, as is ſhewn at *b*: Theſe are of a pale yellow Colour, with purple Bottoms. The Five Stamina are ſhort, and are terminated by oblong erect Summits, which cloſe together, repreſented at *c*; and *d* ſhews One of them taken out of the Flower. The Flowers are ſucceeded by ſmall ſpherical red Berries, included in an oval oblong dark purple Bladder. It flowers here in *July* and *Auguſt*, but it ſeldom ripens its Fruits in this Country.

PLATE CCVII.

PHYTOLACCA, *Tourn. Inſt. R. H.* 299. *Tab.* 154. *Lin. Gen. Plant.* 521. *Solanum racemoſum Americanum, Raii Meth. Plant.* 73. Poke, or Porck Phyſic.

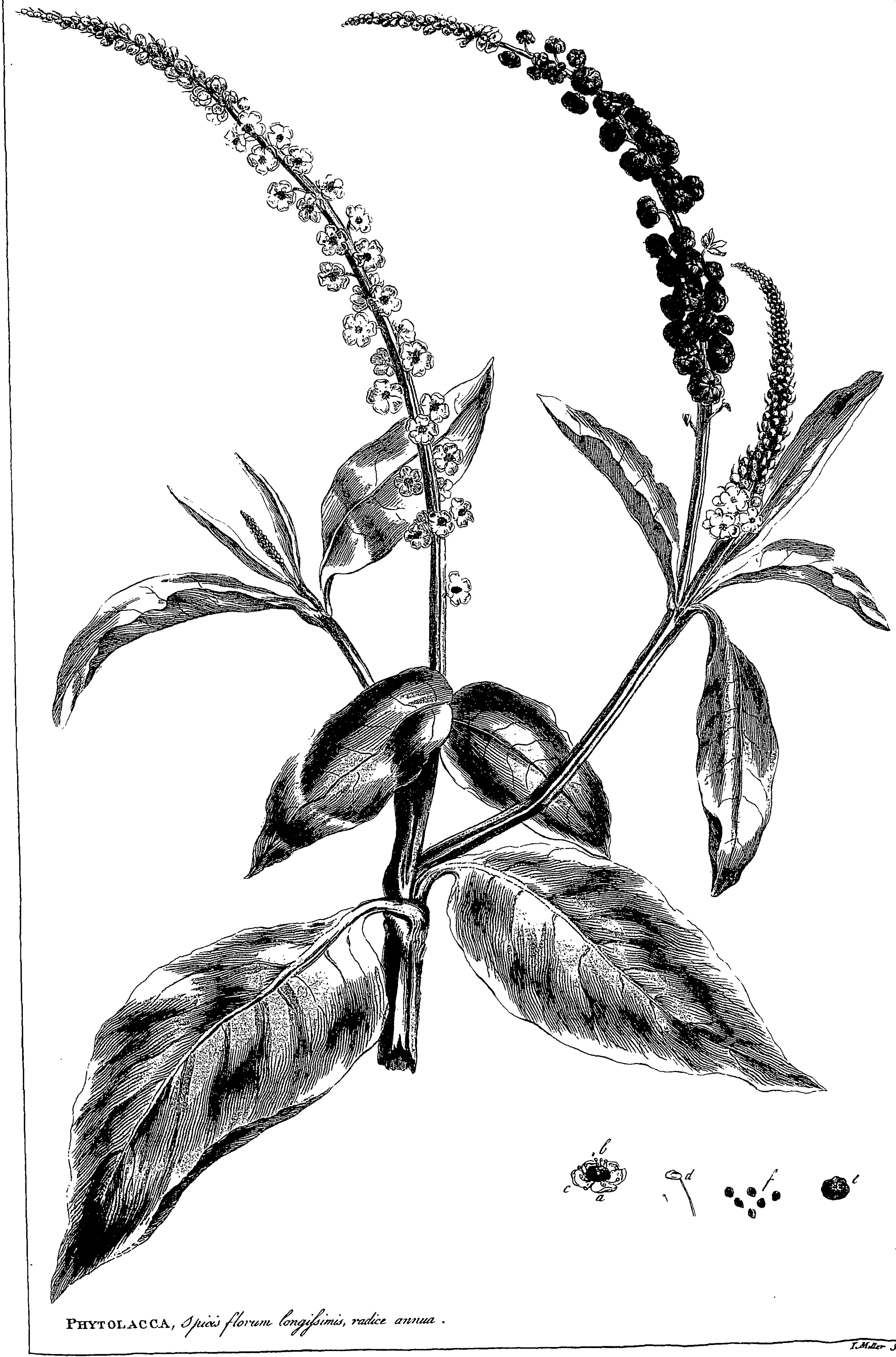
THIS Genus of Plants is ranged in the Eighth Section of *Tournefort*'s Sixth Claſs, which includes the Herbs with a Roſe Flower, whoſe Pointal or Empalement turns to a ſoft Fruit. Dr. *Linnæus* ranges it in the Fifth Section of his Tenth Claſs, which contains thoſe Plants, whoſe Flowers have Ten Stamina and Ten Styles. Mr. *Ray* places it in the Second Section of his Seventeenth Claſs, which contains the Herbs which bear Berries growing in long Bunches.

The Characters are,

The Flower has no Petal; but as the Empalement is coloured, ſo that is by ſome ſtiled the Petal. It hath Five of theſe Petals, which are roundiſh, concave, ſpreading, inflexed at their Points, and permanent, repreſented at a. *It hath for the moſt part Ten Stamina, of the ſame Length with the Petals, which ſpread open, and are terminated by roundiſh Summits, repreſented at* b; *and Ten orbicular depreſſed Germina, joined together at Bottom, but outward they are divided; upon which ſit Ten very ſhort Styles, which are reflexed, and crowned by ſingle Stigmas, ſhewn at* c; *One of which is repreſented, magnified, at* d. *Below this is ſhewn One, of its natural Size. The Germen afterward turns to an orbicular depreſſed Berry, repreſented at* e, *having Ten longitudinal Furrows, and Ten Cells, each containing One ſmooth Seed, repreſented at* f.

The Species here repreſented is,

PHYTOLACCA *ſpicis florum longiſſimis, radice annua.* Phytolacca, with the longeſt Spikes of Flowers, and an annual Root.



PHYTOLACCA, *Spicis florum longiſsimis, radice annua.*

R. Lancake delin
J. Miller Sculp.
Publish'd according to Act of Parliament by P. Miller January 25. 1758.

The Seed of this Plant was brought from the Coaſt of *Malabar*; which ſucceeded in the *Chelſea* Garden, where the Plants have been ſeveral Years cultivated. The Root of this is annual, in which it differs from the common Sort, which hath a perennial Root. The Stalk riſes from Two to Three Feet high, having ſeveral longitudinal Furrows, and is marked with Purple: It is garniſhed with Spear-ſhaped Leaves, Six or Seven Inches long, and Three broad in the Middle, ending in Points: They are of a dark Green, and placed oppoſite, having very ſhort Footſtalks. The Flowers are produced in Spikes, which are Nine or Ten Inches long; in which it differs from all the other Species. Theſe have very ſhort Footſtalks: They are white within, of an herbaceous Colour on their Brims, and the Middle is purple: There is not always the ſame Number of Stamina in them, ſome having Eight and others Nine: Theſe are terminated by roundiſh Summits. It flowers in *July*, and after the Flowers are paſt, the Germen becomes an orbicular compreſſed Berry, divided on the Outſide into Ten Cells by longitudinal Furrows; each of theſe incloſe One ſhining ſmooth black Seed. Theſe Berries have a fine purple Juice, which ſtains Paper or Linen of a beautiful Colour; but it is not permanent. The Root of this Sort decays ſoon after the Seeds are ripe.

PLATE CCVIII.

PINUS, *Tourn. Inſt. R. H.* 585. *Tab.* 355. *Raii Meth. Plant.* 138. *Lin. Gen. Plant.* 956. The Pine-Tree; in *French*, *Pin.*

THIS Genus of Plants is ranged in the Third Section of *Tournefort*'s Nineteenth Claſs, which includes the Trees and Shrubs with amentaceous Flowers, growing at ſeparate Diſtances from the Fruit on the ſame Tree, and a ſcaley Fruit. Mr. *Ray* places it in the Firſt Section of his Claſs of Trees, which bear Cones at ſeparate Diſtances from the Male Flowers on the ſame Tree. Dr. *Linnæus* ranges it in the Ninth Section of his Twenty-fourth Claſs, which includes the Plants with Male Flowers and Fruit on the ſame Plant, whoſe Stamina are joined in One Body.

The Characters of this Genus are,

The Male Flowers are collected into a conical ſcaley Bunch: Theſe have no Petals; but have many Stamina, which are connected at their Baſe, but divide at their Points, terminated by erect Summits. Theſe are included in the Scales, which ſupply the Want of Petals and Empalement. The Female Flowers are collected in One common oval Cone, at a ſeparate Diſtance from the Male on the ſame Tree. Under each Scale of the Cone is produced Two Flowers, which have no Petals, but a ſmall Germen, ſupporting an Awl-ſhaped Style crowned by a ſingle Stigma. The Germen afterward becomes an oblong Nut, crowned with a Wing, included in the rigid Scale of the Cone.

The Species here repreſented is,

PINUS *foliis geminis tenuiſſimis, conis obtuſis, ramis patulis.* Pine-Tree with Two very narrow Leaves coming out of each Sheath, obtuſe Cones, and ſpreading Branches. This is the *Pinus Halepenſis, foliis tenuibus læve virdibus, Rand. Hort. Chelſ. Cat.* 158. *Aleppo* Pine Tree, with narrow light-green Leaves.

The Seeds of this Tree were ſent me from *Aleppo* by Conſul *Cox*, in the Year 1732; from which I raiſed many of the Plants in the *Chelſea* Garden; ſome of which were grown upward of Eight Feet high by the Year 1740, when they were moſt of them deſtroyed by the ſevere Froſt. But Two of the Plants which I had preſented to the late Duke of *Richmond* in 1738, which were planted at *Goodwood* in *Suſſex*, were very little injured by the Cold: For as they had lately been removed, ſo they had not ſo well recovered as to have made any Shoots, whereby the Froſt had little Effect on them. It was from One of thoſe Trees this Branch, with the Cone growing on it, was taken, which is here repreſented.

This ſeems to be a Tree of low Growth, branching out greatly on every Side, almoſt from the Ground. The Bark of theſe Trees is as yet ſmooth, and of a light Brown; the Branches are ſlender and weak; the Leaves are long and narrow, Two coming out from each *Theca* (or Sheath) as is repreſented at *a*: Theſe are of a light Green; and, if bruiſed, emit an Odour of Turpentine. The Cones come out from the Sides of the Branches, as is ſhewn at *b*: Theſe are not ſo long as thoſe of the *Pineaſter*, and end in more obtuſe Points: The Scales of the Cones are alſo more obtuſe, and have a greater Reſemblance to thoſe of the True or *Garden Pine*, in theſe Reſpects, but are not more than half their Size: Theſe are compoſed of hard Scales; under each of theſe are lodged Two ſmall Seeds, repreſented at *c*: Theſe are crowned with broad Wings, as is ſhewn at *d*; which are of uſe to carry the Seeds to ſome Diſtance, when they fall out of the Cones.

I have lately received ſome Cones of a *Pine-Tree*, which were brought from *Aleppo* by Dr. *Ruſſel*, who had been ſeveral Years Phyſician to the *Engliſh* Factory there; from which I have raiſed many of the Plants, which have a near Reſemblance to this here figured at preſent; but the Cones were more pointed, and the ſcaley Protuberances ſharper than thoſe of the Cones which grew at *Goodwood*, ſo that I ſuſpect they may be different: For the Seeds which came from Conſul *Cox*, and from which the Trees at *Goodwood* were raiſed, were taken out of the Cones Abroad; ſo that until the Trees had produced their Cones here, I was at a loſs to know the Species. I do imagine theſe Cones brought by the Doctor to be of *Tournefort*'s *Pine*; which he titles *Pinus Orientalis, foliis durioribus amaris, fructu parvo peracuto, Cor.* 41.

PLATE CCIX.

POLEMONIUM, *Tourn. Inſt. R. H.* 146. *Tab.* 61. *Lin. Gen. Plant.* 200. *Valeriana Græca, Raii Meth. Plant.* 85. *Greek* Valerian, or *Jacob*'s Ladder.

THIS Genus of Plants is ranged in the Sixth Section of *Tournefort*'s Second Claſs, which includes the Herbs with a Wheel-ſharped Flower of One Leaf, whoſe Pointal becomes a dry Fruit. Dr. *Linnæus* ranges it in the Firſt Section of his Fifth Claſs, which contains thoſe Plants whoſe Flowers have Five Stamina and One Style. Mr. *Ray* places it in his Nineteenth Claſs, which includes the Herbs with a Flower of One Petal, whoſe Seeds are included in a Capſule.

The Characters of this Genus are,

The Empalement of the Flower is permanent, of One Leaf, and is cut into Five Segments, as is repreſented at a: *The Flower is of One Petal, with a Tube ſhorter than the Empalement; but is divided into Five Segments at the Top, which ſpread open, as is ſhewn at* b. *Theſe Segments are broad and obtuſe, as is repreſented at* c. *It hath Five ſlender Stamina, which are inſerted in the Valves of the Tube, as is ſhewn at* e; *which are inclined, and ſhorter than the Petal: Theſe are terminated by roundiſh Summits, as is ſeen at* f. *In the Bottom of the Tube is ſituated an acute oval Germen, ſupporting a ſlender Style the Length of the Petal, as is ſhewn at* g. *The Germen afterward turns to an oval three-cornered Capſule, repreſented at* h; *which have Three Cells, as is ſhewn at* i, *which are filled with irregular acute-pointed Seeds, repreſented at* k; *One of which is magnified at* l.

The Species here repreſented is,

POLEMONIUM *foliis pinnatis, radicibus reptatricibus, Flor. Virg.* 22. *Greek* Valerian, with winged Leaves and a creeping Root.

This is by ſome Authors ſuppoſed to be the ſame with the common *Greek* Valerian: But no one who has ever compared them together, can doubt of their being diſtinct Species. For this Plant has creeping Roots, which the common hath not: The Stalks of this branches out wide; whereas thoſe of the common are erect, and never branch. The Leaves of this have but Three Pair of Lobes, ending with an odd one, as is repreſented at *d*; but thoſe of the common Sort have Seven or Eight Pair of Lobes, which are placed much cloſer together on the Midrib. The Flowers of this are ſcattered looſely at the End of the Branches; whereas thoſe of the common Sort are cloſely ſet together, and are larger. This Sort grows naturally in *North America*, but the common Sort is found growing naturally in ſome Places in the North of *England*.

PLATE CCX.

POLYANTHES, *Lin. Gen. ed.* 4. *Crinum, ed.* 5. *Hyacinthus, Breyn. African* blue umbellated Hyacinth.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Sixth Claſs, which includes the Plants whoſe Flowers have Six Stamina and One Style. In the former Editions of his *Genera Plantarum*, and in the Catalogue of *Clifford*'s Garden, he joined this Plant to the *Tuberoſe*, under the Title of *Polyanthes*; but in the laſt Edition he has ſeparated it from that, and has joined it to his Genus of *Crinum*, with whoſe Characters it agrees.

The Characters of this Genus are,

The Umbel of Flowers is included in a two-leaved Sheath, which afterward dries, and is reflexed, as is repreſented at d. *The Flower is Funnel-ſhaped, of One Leaf, with an oblong cylindrical inflexed Tube, whoſe upper Part is cut into Six obtuſe Segments, as is ſhewn at* e. *It hath Six Awl-ſhaped Stamina, which are joined to the Petal from their Baſe almoſt their whole Length; and are terminated by oblong narrow Summits, repreſented at* f. *The Germen is ſituated at the Bottom of the Tube, ſupporting an Awl-ſhaped Style, repreſented at* g. *The Germen afterward turns to an almoſt oval Capſule, with Three Cells filled with Seeds.*

The Species here repreſented is,

POLYANTHUS *floribus umbellatis, Vir. Cliff.* 29. *Hort. Cliff.* 126. Polyanthes with umbellated Flowers. This is the *Crinum foliis ſublanceolatis, corollis obtuſis, Lin. Sp. Plant.* 292. Crinum with Spear-ſhaped plain Leaves, and obtuſe Petals to the Flower. *Breynius* titles it *Hyacinthus Africanus tuberoſus, flore cæruleo umbellato, Prod.* 1. *p.* 39. *African* tuberous Hyacinth, with blue umbellated Flowers.

This Plant grows naturally at the *Cape of Good Hope*. The Root is compoſed of many thick fleſhy Fibres, as large as a Man's little Finger, which ſtrike deep into the Ground, and are united at the Top into a Head, out of which ariſe the Leaves, cloſed together, as is repreſented at *a*. Theſe are thick, ſucculent, about a Foot long, and near an Inch broad, compreſſed, and of a dark Green, repreſented at *b*. Between theſe come out the Flower-ſtalk, marked *c*; which riſes about Two Feet high, round, naked to the Top, and as large as a Man's little Finger, ſupporting a large Umbel of blue Flowers, which appear the latter End of *Auguſt*; and ſometimes they are ſucceeded by Seeds, which ripen in the Winter. When any of theſe Flowers come out later in the Autumn, they will continue in Beauty great Part of Winter, and make a fine Appearance in the Green-houſe during that Time.

PLATE CCXI.

PTELEA, *Lin. Gen. Plant.* 141. *Carolina* Shrub Trefoil.

The Characters are,

The Flower hath Four oval Spear-ſhaped Petals, which are thick, plain, and ſpread open; theſe are longer than the Empalement a. *The Empalement* b *is cut into Four acute Parts, which are ſmall: The Flower has Four Awl-ſhaped Stamina, terminated by roundiſh Summits; it hath a roundiſh compreſſed Germen, ſupporting a ſhort Style, crowned by Two obtuſe Stigmas. The Germen afterwards becomes a membraneous roundiſh Capſule, as is repreſented at* c, *ſtanding perpendicular, having Two Cells, each containing One obtuſe Seed, faſtened to the Baſe of the Capſule.*

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Fourth Claſs, which includes thoſe Plants whoſe Flowers have Four Stamina and One Style.

The Species here repreſented is,

PTELEA *foliis ternatis, Lin. Sp. Plant.* 118. Ptelea with trifoliate Leaves. This is the *Frutex Virginianus trifolius, ulmi Samaris Baniſteri, Pluk. Alm.* 159. *Virginia* Trefoil Shrub, with Seeds like thoſe of the Elm Tree, commonly called by the Gardeners *Carolina Shrub Trefoil.*

This Shrub riſes with a Stem about Three Inches Diameter, to the Height of Five or Six Feet, dividing into ſeveral Branches, which are covered with a ſmooth greyiſh Bark, and are garniſhed with trifoliate Leaves, ſtanding upon long Footſtalks. The Lobes are oval, Spear-ſhaped, ſmooth, and of a deep Green; theſe come out late in the Spring, and about the ſame time the Bunches of Flower-buds appear, which is in *June*. The Leaves are then but ſmall, and afterwards increaſe in their Size, and do not arrive to their full Bigneſs till the Flowers are decayed. The Flowers come out in large Bunches at the End of the Branches; they are of a whitiſh green Colour, and compoſed of Four or Five ſhort Petals, which end in acute Points; theſe are faſtened at their Baſe to a ſhort Empalement, cut into Four Segments, almoſt to the Bottom. In the Center of the Petals are ſituated the Germen and Stamina. The Germen is roundiſh, compreſſed, and ſtands perpendicular, ſupporting a very ſhort Style, crowned by obtuſe Stigmas: This is ſurrounded by Four ſhort, coloured Styles, which are terminated by roundiſh Summits. After the Flowers decay, the Germen turns to a roundiſh Capſule with Two Cells, having a leafy Membrane round it, like the Seeds of the *Elm Tree*. In each Capſule is included One Seed.

This Plant grows naturally in *Virginia*, where it was diſcovered by Mr. *Baniſter*, who ſent it to *England*; and many Years after Mr. *Cateſby* ſent over the Seeds of this Plant from *Carolina*, where it was found growing in Plenty. It flowers in *June*; and in warm Seaſons the Seeds will ſometimes ripen here the Beginning of *September*.

This Shrub is hardy enough to thrive in the open Air in *England*, provided it is planted in a dry Soil, and a warm Situation; but in ſtrong Land, where the Wet is detained in Winter, the Plants are frequently deſtroyed by ſevere Froſt.

There is no great Beauty in the Flowers of this Shrub; but thoſe who are curious in collecting rare Trees and Shrubs, preſerve it in their Gardens for the ſake of Variety.

PLATE CCXII.

PULMONARIA, *Tourn. Inſt.* 136. *Tab.* 55. *Raii Meth. Plant.* 56. *Lin. Gen. Plant.* 169. Lungwort; in *French*, Pulmonaire.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Second Claſs, which includes the Herbs with a Funnel, or Wheel-ſhaped Flower of One Leaf, whoſe Pointal in encompaſſed with Four Embryo's, which afterward become ſo many Seeds, that ripen in the Empalement. Mr. *Ray* places it in his Thirteenth Claſs, in which he ranges the Herbs with rough Leaves, whoſe Flowers are ſucceeded for the moſt part by Four naked Seeds. Doctor *Linnæus* ranges it in the Firſt Section of his Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and One Style.

The Characters are,

The Flower is of One Petal, having a cylindrical Tube, as is repreſented at c; *the Brim is obtuſe, erect, and ſpreading; the Chaps are perforated. This ſits in a Five-cornered cylindrical Empalement of One Leaf, which is permanent, repreſented at* d. *The Flower has Five ſhort Stamina included in the Tube, as is ſhewn at* e, *terminated by erect Summits, as is repreſented at* f. *There are Four Germina ſituated in the Empalement* g, *between which ariſes the Pointal, which is terminated by an indented Stigma. The Germina afterward become ſo many roundiſh Seeds ſitting in the Empalement.*

The Species here repreſented is,

PULMONARIA *calycibus abbreviatis, foliis lanceolatis obtuſiuſculis, Lin. Gen. Plant.* 135. Lungwort with a ſhorter Empalement, and Spear-ſhaped Leaves ending in very blunt Points. This is the *Symphytum ſ. Pulmonaria non maculoſa, foliis glabris Americana, flore patulo cæruleo, Pluk. Alm.* 359. *American* Comfrey or Lungwort, not ſpotted, with ſmooth Leaves, and a blue ſpreading Flower. In the *Flora Virginiana* it is titled *Pulmonaria calyce tubo corollæ breviore, perianthiis quinquepartitis* 20. Lungwort, with an Empalement ſhorter than the Tube of the Petal, and divided into Five Parts at the Brim.

This Plant grows naturally on the Mountains in *North America*. The Seeds of this were ſent from *Virginia* by Mr. *Baniſter* many Years ſince; and ſome of the Plants were raiſed in the Garden of the Biſhop of *London* at *Fulham*, and in ſome other curious Gardens near *London*. It has a perennial Root, but the Stalks and Leaves are annual, always decaying toward the latter Part of Summer. In the Beginning of *March* the new Leaves appear out of the Ground; theſe at firſt are ſmall, but grow to the Length of Four Inches, and are Two Inches and a Half broad in the broadeſt Part, which is toward the Footſtalk, as is ſhewn at *a*; they are ſmooth, of a light Green, and have Footſtalks an Inch and a half long: From each Root come out Five or Six of theſe Leaves, and between them ariſes the Flower-Stem, which grows a Foot and a half high, dividing at the Top into Four or Five Branches, each having One ſhorter Leaf, as is repreſented at *b*. The Branches are terminated by Four or Five Funnel-ſhaped Flowers, ſtanding upon ſhort Footſtalks; theſe have very ſhort Empalements. The Tube of the Flower is pretty long, and ſpreads open above in the Form of a Funnel. The Brim is ſlightly indented in Five Parts. The moſt common Colour of theſe Flowers is blue; but ſome of them vary to purple, and others are white; but theſe Varieties ariſe from the ſame Seeds; the Flowers generally nod downward. They appear toward the latter End of *April*, and if the Seaſon is moderate, or the Plants grow in a ſhady Situation, they will continue in Beauty great Part of *May*; and ſometimes they are ſucceeded by Seeds which ripen in *Auguſt*.

PLATE CCXIII.

PUNICA, *Tourn. Inſt. R. H.* 636. *Tab.* 407. *Lin. Gen. Plant.* 544. *Punica Malus, Raii Meth. Plant.* 143. Pomegranate; in *French*, Grenadier.

THIS Genus of Plants is ranged in the Eighth Section of *Tournefort*'s Twenty-firſt Claſs, which includes the Trees and Shrubs with a Roſe Flower, whoſe Empalement becomes a Fruit pregnant with hard Seeds. Dr. *Linnæus* ranges it in the Firſt Section of his Twelfth Claſs, in which he places thoſe Plants whoſe Flowers have about Twenty Stamina, which are inſerted either in the Empalement or Petals of the Flower. Mr. *Ray* places it in his Claſs of Trees with umbilicated Fruit, having many Seeds.

The Characters are,

The Flower has a Bell-ſhaped coloured Empalement of One Leaf, cut at the Top into Five or Six Parts, as is repreſented at b, *which is permanent. The Flower hath Five roundiſh erect ſpreading Petals, ſhewn at* c, *which are inſerted in the Empalement; and a great Number of Hair-like Stamina, which are inſerted in the Empalement, as is repreſented at* e, *terminated by oblong Summits. The Germen, marked* f, *is ſituated under the Petals of the Flower, ſupporting a ſingle Style, terminated by a headed Stigma, repreſented at* h *in its natural Size, and magnified at* g. *The Germen afterwards becomes a large Fruit almoſt globular, as is ſhewn at* d, *crowned by the Empalement, which has a new Situation, as is repreſented at* i. *The Fruit is divided into ſeveral Cells by membraneous Partitions, as is ſhewn at* k; *theſe are filled with roundiſh ſucculent Seeds, marked* l.

The Sorts here repreſented are,

Fig. 1. PUNICA *flore pleno majore, C. B. P.* Pomegranate with a larger double Flower. This is the *Malus punica, flore pleno, H. R. Par.* The double flowering Pomegranate. *John Bauhin* titles it *Balauſtia Hiſpanica*, 1. 83. *Spaniſh* Balauſtium.

This Sort grows naturally in *Spain* and *Portugal*, where it riſes with a woody Stalk, dividing into many Branches from the Bottom to the Height of Eighteen or Twenty Feet. From the Branches come out a great Number of ſlender Twigs, having a few Thorns, and are garniſhed with oblong narrow Leaves Three Inches long, and half an Inch broad, of a light Green, ſet on by Pairs oppoſite, as is repreſented at *a*. The Flowers come out from the Side and at the End of theſe Twigs, ſometimes One, and at others, Two or Three together; but there is but One Flower at each Place open at the ſame time; but, after One is fallen, the Buds on the Sides advance, and flower. Theſe have a very thick fleſhy Empalement of a deep red Colour, and within are included a great Number of ſhort Petals of a bright crimſon Colour. Theſe Shrubs begin to ſhew their Flowers the latter End of *July*; and in warm Seaſons there will be a Succeſſion of theſe Flowers till the Middle of *September*; but there is no Fruit ſucceeds to the double Flowers. The Empalement of the Flowers are the *Balauſtia* of the Shops.

Fig. 2. PUNICA *quæ Malum Granatum fert, Cæſalp.* 141. Punica which bears the Granate Apples. This is the *Malus Punica ſativa, C. B. P.* 438. The manured Pomegranate. *Tabernemontanus* titles it *Malus Granate ſive Punica, Icon.* 1033. The Granate Apple or Punica.

Theſe Plants are cultivated in the South of *France*, in *Spain*, *Portugal*, *Italy*, and moſt other warm Countries in *Europe*; and alſo in *Africa* and *America*. There are ſeveral Varieties of this Fruit, which differ in their Size and Flavour: Some have ſweet, others ſour Fruit; and there are ſome of a vinous Flavour, which are neither ſweet or ſour, but have an agreeable Mixture of both. The Trees do not differ either in the Form or Growth of their Branches, nor the Leaves, from thoſe with double Flowers. They both caſt their Leaves early in the Autumn, and are late in the Spring before they put out new ones.

The Sort with double Flowers will thrive tolerably well in the open Air, and in warm Seaſons produce Plenty of Flowers; but when they are trained againſt Walls to a good Aſpect, they will flower in greater Plenty. If the other Sort is planted againſt a South-aſpected Wall, in a ſheltered Situation, the Fruit will grow to a larger Size in warm Years; but they rarely ripen ſo well as to become palatable in *England*.

PLATE CCXIV.

QUAMOCLIT, *Tourn. Inſt. R. H.* 116. *Tab.* 39. *Raii App. Meth.* 190. *Ipomœa, Lin. Gen. Plant.* 199. Scarlet Convolvulus, or Sweet William.

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Second Claſs, which includes the Herbs with a Funnel-ſhaped Flower of One Petal, whoſe Pointal becomes the Fruit. It muſt be ranged in Mr. *Ray*'s Firſt Section of his Nineteenth Claſs, which includes the Herbs with a uniform regular Flower of One Petal, whoſe Seeds are included in Capſules. Dr. *Linnæus* places it in the Firſt Section of his Fifth Claſs, which contains thoſe Plants whoſe Flowers have Five Stamina and One Style.

The Characters are,

The Flower is of One Petal, which is Funnel-ſhaped, having a long cylindrical Tube cut into Five Parts at the Top, which ſpread open, as is repreſented at c. *It hath Five Awl-ſhaped Stamina, which are almoſt the Length of the Petal, terminated by roundiſh Summits, as is ſhewn at* d, *and a roundiſh Germen ſituated at the Bottom of the Tube, marked* e, *ſupporting a Style which is longer than the Stamina, crowned by a roundiſh Stigma, repreſented at* h; *theſe are included in a ſmall Empalement cut into Five Parts, repreſented at* f; *and at* g *are ſhewn the Five Stamina ſpread aſunder. The Germen afterward turns to an oval Capſule,* k, *which hath Three Cells, repreſented at* i, *each containing One oblong Seed, marked* l.

The Species here repreſented is.

QUAMOCLIT *foliis tenuiter inciſis & pinnatis*, *Tourn. Inſt. R. H.* 116. Quamoclit with Leaves finely cut and winged. This is the *Quamoclit ſ. Jaſminum Americanum, Cluſ. poſt.* 9. Quamoclit, or *American* Jaſmine. *Caſpar Bauhin* titles it *Jaſminum Millefolii folio, Pin.* 391. Jaſmine with a Milfoil Leaf. Dr. *Linnæus* titles it *Ipomœa foliis pinnatifidis linearibus, floribus ſolitariis, Sp. Plant.* 159. Ipomœa with linear Wing pointed Leaves, and Flowers ſtanding ſingly.

This Plant grows naturally in both *Indies*, from whence the Seeds were firſt brought to *Europe*, where it has been long cultivated in the curious Gardens. It is an annual Plant, which riſes with Two oblong pretty broad Seed Leaves, which remain a conſiderable time before they fall off. Between theſe come out One or Two ſlender twining Stalks, which faſten themſelves about any neighbouring Support, and will riſe to the Height of Four or Five Feet, ſending out ſeveral Side Branches, which twine about each other, and alſo about the principal Stalk. Theſe are garniſhed with winged Leaves, placed alternately, repreſented at *a*, which are compoſed of ſeveral narrow Lobes or Wings, marked *b*, placed oppoſite along the Midrib; they are of a bright green Colour, ſtanding upon pretty long Footſtalks. The Flowers come out ſingly from the Side of the Stalks, ſtanding upon ſlender Footſtalks: They have a long ſlender Tube, which is enlarged toward the Top, where it is cut into Five Segments, which ſpread open in Form of a Star. They are of a beautiful red Colour, and appear in *July* and *Auguſt*, continuing in Succeſſion great Part of *September*. Theſe are ſucceeded by oval Seed Veſſels having Three Cells, each containing One oblong Seed, which ripen in the Autumn.

The Inhabitants of the *Britiſh* Iſlands in *America* call this Plant *Sweet William*; I ſuppoſe, for the Beauty of its Flowers, for they have no Scent. It runs up the Hedges in thoſe Countries to a conſiderable Height, and makes a fine Appearance.

PLATE CCXV.

QUERCUS, *Tourn. Inſt. R. H.* 582. *Tab.* 349. *Raii Meth. Plant* 140. *Lin. Gen. Plant.* 949. The Oak; in *French*, Chêne.

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Nineteenth Claſs, which includes the Trees and Shrubs with ropy Flowers, growing at ſeparate Diſtances from the Fruit on the ſame Tree, whoſe Fruit has a leathery Covering. Mr. *Ray* places it among the Trees, whoſe male Flowers grow at ſeparate Diſtances from the Fruit, whoſe interior Kernel is ſoft, and the Shell leathery. Dr. *Linnæus* ranges it in the Eighth Section of his Twenty-firſt Claſs, which includes the Plants with Male and Female Flowers on the ſame Plant, whoſe Male Flowers have many Stamina.

The Characters are,

The Male Flowers are diſpoſed looſely, in Form of a Rope, as is repreſented at a: *Theſe have no Petals, but an Empalement of One Leaf, cut into Four or Five acute Points, as is ſhewn at* b, *in which are a great Number of ſhort Stamina, terminated by large twin Summits. The Female Flowers ſit cloſe to the Branches on the ſame Tree: Theſe have a hemiſpherical rough Empalement, which afterward becomes the Cup of the Fruit marked* c: *They have no Petals, but a ſmall oval Germen, ſupporting a ſingle quinquefid Style, crowned by ſingle Stigmas. The Germen afterward becomes an oval Nut, repreſented at* d, *fixed at the Baſe to the Cup, which was the Empalement.*

The Species here repreſented is,

QUERCUS *foliis ovato oblongis glabris ſerrato-repandis, Lin. Sp. Plant.* 996. Oak with oblong oval ſmooth Leaves, ſawed on their Edges, whoſe Serratures turn backward. This is the *Quercus calyce echinato, glande majore, C. B. P.* 420. Oak with a large Acorn, having a prickly Cup. *Dodonæus* titles it *Ægilops ſive Cerris majore glande, Pempt.* 831. Egylops or Cerris, with a larger Acorn.

This

This Tree grows naturally in the *Levant*, from whence the Fruit are brought annually for Dyeing: Theſe are called *Velani*, and the Tree *Velanida*, by the *Greeks*. It is one of the faireſt Species of Oak in the World: The Trunk of this riſes as high as the common Oak: The Branches extend very wide on every Hand; theſe are covered with a greyiſh Bark, intermixed with brown Spots: They are cloſely garniſhed with oblong oval Leaves about Three Inches long, and almoſt Two broad, which are deeply ſawed on their Edges: Moſt of the Serratures or Teeth turn backward, and terminate in a brown Point: Theſe Leaves are ſtiff, of a pale Green on their upper Side, and covered on their under with an almoſt imperceptible hoary Down. The Acorns are very different from thoſe of the common Oak, having very large ſcaly Cups which almoſt cover the Acorn, the Point of which only appears out of it, which is hollowed like a Navel: The Scales of the Cups lie over each other like thoſe of Fiſh, but end in rough blunt Ridges, which are raiſed a Quarter of an Inch high. Theſe Cups are, ſome of them, as large as ſmall Apples: The Acorns are ſhorter than thoſe of our common Oak; they are broad and flatted at the Top, but narrower at their Baſe, as is repreſented at *f*; and at *g* and *e* the Fruit is ſhewn cut open longitudinally.

This Tree thrives very well in the open Air in *England*, and is never injured by Froſt; but there are but few of them at preſent here, the greateſt Part of which were raiſed in the *Chelſea* Garden in 1748.

PLATE CCXVI.

Ranunculus, *Tourn. Inſt. R. H.* 285. *Tab.* 149. *Raii Meth. Plant.* 67. *Lin. Gen. Plant.* 619. Crowfoot; in *French*, Renoncule.

THIS Genus of Plants is ranged in the Seventh Section of *Tournefort's* Sixth Claſs, which includes the Herbs with a Roſe Flower, whoſe Pointal turns to a Fruit, compoſed of ſeveral Seeds gathered into a kind of Head. Mr. *Ray* places it in his Fifteenth Claſs, with the Herbs whoſe Flowers have Five Petals, which are ſucceeded by many naked Seeds. Dr. *Linnæus* ranges it in the Seventh Section of his Thirteenth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina and Germina.

The Characters are,

The Empalement of the Flower is compoſed of Five oval Leaves, marked a, *which are concave, and fall away. The ſingle Flowers have Five obtuſe neat Petals,* b, *with ſmall Tails, each having a Nectarium riſing from a Hole on the upper Side of the Tail. In the Center of the Flower is ſituated a great Number of Stamina, about half the Length of the Petals, repreſented at* c, *and a great Number of Germina collected in a Head, as is ſhewn at* d: *Theſe have no Styles, but have ſmall reflexed Stigmas. The Germina afterward become ſo many naked Seeds ſtanding on ſmall Footſtalks, repreſented at* e, *which are faſtened to the Receptacle* f. *The Seeds are of uncertain Figures, and are reflexed at their Points, as is ſhewn at* m.

The Species here repreſented is,

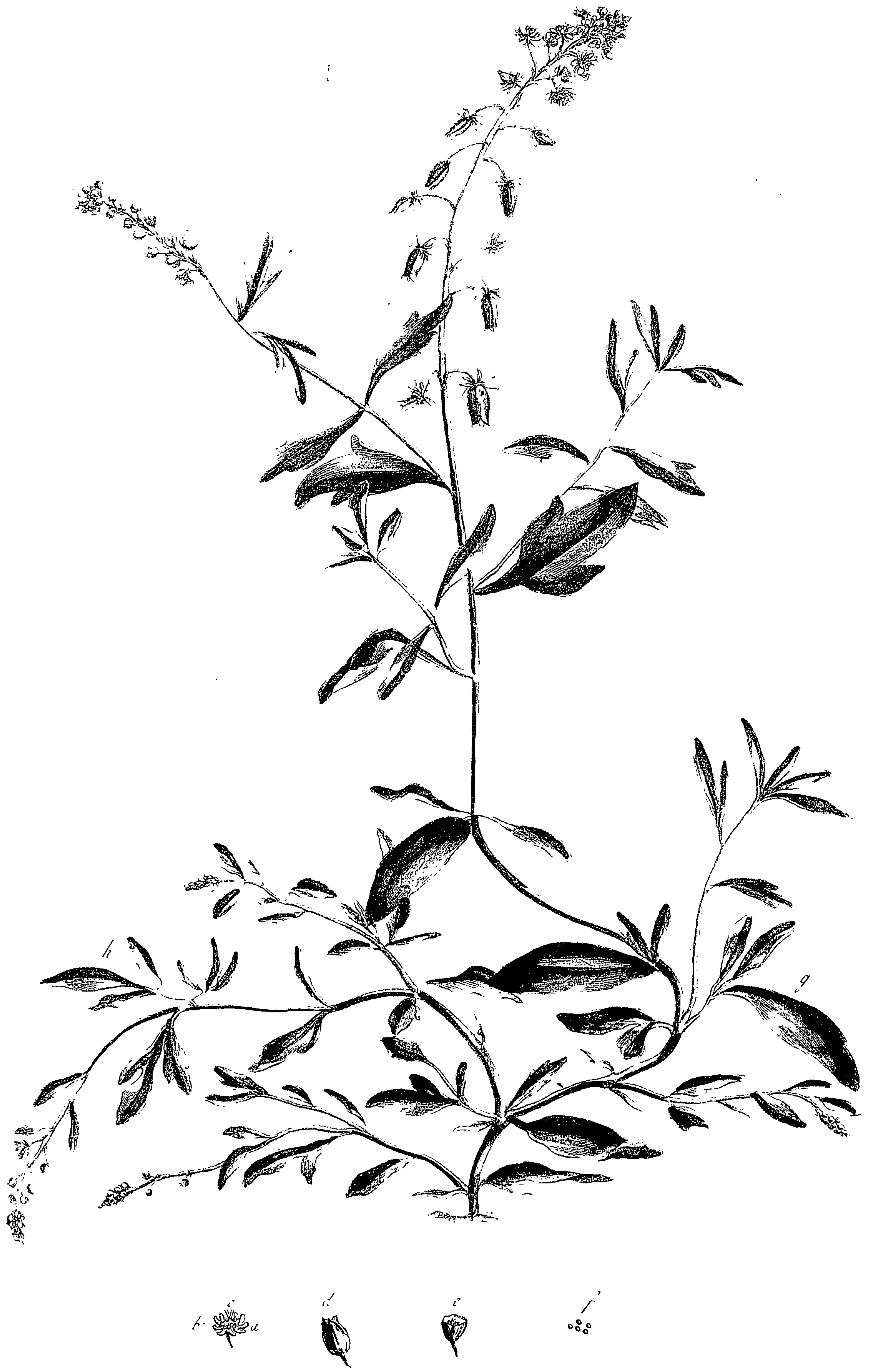
Ranunculus *foliis ternatis biternatiſque, foliolis trifidis inciſis, caule inferne ramoſo, Lin. Sp. Plant.* 552. Ranunculus with trifoliate, and twice trifoliate Leaves, whoſe Lobes end in Three Points, which are cut, and the Stalk branches from the Bottom.

This general Title includes all thoſe Varieties of *Perſian Ranunculi*, which are to be found in the *European* Gardens: For all the beautiful Flowers with which the Floriſts Gardens are now ſtored, have been produced from Seeds of ſingle Flowers originally; but by Culture have been ſo much improved, as to vie for Beauty and Fulneſs of Flowers with any of the flowering Tribe. But as theſe are only ſeminal Variations, ſo they ſhould be kept under this ſpecific Title.

The Flowers here exhibited are ſuch as the Floriſts term ſemi-double; and from the Seeds of ſuch all the moſt valuable Flowers are produced; ſo I choſe rather to take the Figures of theſe, than of the moſt double Flowers, becauſe in theſe the Characters are almoſt as perfect as thoſe of the ſingle Flowers, and theſe are wanting in the very full Flowers; ſo that theſe exhibit the Repreſentation of perfect good Flowers.

The Root of this Plant, repreſented at *h*, is compoſed of many thick fleſhy Fangs or Fibres, which unite at the Top into a Head: From theſe are ſent forth many ſlender long Fibres, ſtriking deep into the Ground; and from the Head ariſe ſeveral Leaves, which are compoſed of Three, Six, or Nine Lobes of irregular Forms, and cut at the Top into various Segments. Between theſe ariſe the Flower-ſtalks, which are about a Foot high, taper, hairy, and branching out at a little Diſtance from the Root: They are garniſhed with Leaves, ſtanding on Footſtalks, repreſented at *i*, whoſe Baſes embrace the Stalks; the Leaves divide firſt into Three Parts, which are again divided or cut, as is ſhewn at *k*, and theſe are generally terminated by trifid Points, as is repreſented at *l*: The Leaves are hairy; thoſe on the lower Part of the Stalk are much larger, and more compounded than the upper Leaves. The Flowers grow on the Top of the Stalk, which is naked a conſiderable Length below: They are of various Sizes and Colours, the Outſide of the Petals being often of a different Colour from the Inſide, as is ſhewn in the Figures: They appear in *May*; and in moderate Seaſons, or where they are ſhaded from the Sun in the Heat of the Day, there will be a Succeſſion of Flowers in Beauty at leaſt a Month. The Seeds ripen in *July*.

Pl. CCXVII.



RESEDA, *foliis integris trilobisque, floribus tetragynis.*

J. Miller delin. et Sculp.

Publish'd according to Act of Parliament by J. Miller March 21. 1758.

PLATE CCXVII.

Reseda, *Tourn. Inſt. R. H.* 423. *Tab.* 238. *Raii Meth. Plant.* 112. *Lin. Gen. Plant.* 535. Baſtard Rocket.

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Eleventh Claſs, which includes the Herbs with an anomalous Flower of ſeveral Petals, whoſe Pointal turns to a Fruit with One Capſule. Mr. *Ray* places it in the Second Diviſion of the Second Section of his Twenty-ſecond Claſs, which contains the Plants with an irregular difform Flower, whoſe Seeds grow in a Capſule. Dr. *Linnæus* ranges it in the Third Section of his Eleventh Claſs, which includes thoſe Plants whoſe Flowers have from Eleven to Nineteen Stamina, and Three Styles.

The Characters of the Genus are,

The Empalement of the Flower is of One Leaf, cut into narrow, acute, erect Segments, and is permanent. The Flower is compoſed of ſeveral diſſimilar Petals, unequal in Size, and always terminated in Three Points; it has a plain erect mellous Gland, produced from the Receptacle of the Flower to the upper Side of the ſuperior Petal between the Stamina, joined to the Baſe of the Petal on the ſame Side, and dilated It hath Fifteen or Sixteen ſhort Stamina, terminated by obtuſe erect Summits, the Length of the Petals; and a gibbous Germen ſitting upon very ſhort Styles, crowned by ſingle Stigmas. The Germen afterward turns to an angular gibbous Capſule, opening between the Styles, with One Cell, filled with angular Kidney ſhaped Seeds, faſtened to the Capſule.

The Species here repreſented is,

Reseda *foliis integris trilobiſque, floribus tetragynis.* Baſtard Rocket with intire and Three-lobed Leaves, and Flowers having Four Styles; commonly called *Sweet Reſeda*, or *Mignonette d'Egypte.*

This Plant is ſupoſed to be a Native of *Egypt*, from whence the Seeds were brought to the South of *France*. The Seeds of this were ſent me from *Leyden*, by Dr. *Adrian Van Royen*, which ſucceeded in the *Chelſea* Garden, and ſoon after the Seeds were brought from the South of *France* by the Right Honourable the Lord *Bateman*. This Plant ſends out from the Root many Stalks, which lie proſtrate on the Ground, and divide into many diffuſed Branches, ſpreading on every Side more than a Foot from the Root; they are ſometimes intire, but generally are divided into Three Lobes, as is repreſented at *g*; theſe are of a light Green, and are placed without Order, having very ſhort Footſtalks. The Flowers are produced in looſe Spikes at the End of the Branches, each ſtanding upon a ſhort Footſtalk. They are of an herbaceous white Colour, compoſed of ſeveral ſmall trifid Petals, repreſented at *a*, in the Center of which is ſituated the Germen, as is ſhewn at *b*, ſurrounded by many ſhort Stamina, and Four Styles crowned by erect Stigmas marked *c*. Theſe Flowers have an Odour like that of freſh Raſpberries, for which the Plants are chiefly eſteemed: After the Flowers fade the Germen turns to an oblong angular Huſk, repreſented at *d*, opening toward the Top, having but One Cell as is ſhewn at *e*, including many ſmall Seeds repreſented at *f*. Theſe Plants flower moſt Part of Summer, and, if they are placed in a good Green-houſe, they may be preſerved One Winter, and continue flowering till the Spring. The Seeds ripen in the Autumn.

This Plant is ſo like the common ſmaller *Reſeda* in its Appearance, as ſcarcely to be diſtinguiſhed from it; but the Flowers of the common Sort have no Scent: And I believe that the Seeds of that have been ſold for the *Mignonette*, which has occaſioned ſome Perſons to ſuppoſe that the *Mignonette* had loſt its Sweetneſs.

PLATE CCXVIII.

Rheum, *Lin. Gen. Plant.* 454. *Rhabarbarum, Tourn. Inſt. R. H.* 89. *Tab.* 18. Rhubarb.

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Ninth Claſs, which includes thoſe Plants whoſe Flowers have Nine Stamina and Three Styles. *Tournefort* places it in the Fourth Section of his Firſt Claſs, which contains the Herbs with a Bell-ſhaped Flower of One Leaf, whoſe Pointal turns to a ſingle Seed.

The Characters of this Genus are,

The Flower has no Empalement; it hath One Petal, whoſe Baſe is narrow and impervious, cut at the Top into Six obtuſe Segments, as is repreſented at a, a: *The firſt is of the natural Size, the other is magnified. Theſe are ſpread open at* b. *It hath Nine Hair-like Stamina repreſented at* c, *which are inſerted in the Petal, and are of the ſame Length as is ſhewn at* d, d, *terminated by oblong Summits repreſented at* e. *In the Center is ſituated a three-cornered ſhort Germen, with no viſible Style, crowned by Three feathered reflexed Stigmas: The Germen afterward becomes a large three-cornered pointed Seed, repreſented at* f, *having membranaceous Borders as is ſhewn at* g: *In the Center of this is lodged the oblong Germ* h.

The Species here repreſented is,

Rheum *foliis cordatis glabris, marginibus ſinuatis, ſpicis diviſis nutantibus.* Rhubarb with ſmooth Heart-ſhaped Leaves, ſinuated on their Borders, and divided Spikes of Flowers which nod.

The Seeds of this Sort were ſent me from *Peterſburgh* for the true Rhubarb, and ſo far as I can judge from the Appearance of the Root, it approaches nearer to the foreign Rhubarb than any of the Plants which have yet been introduced for it; but as the old Roots are much better than the new, ſo there muſt be Time allowed for their Growth, before it can be determined whether it is the true.

The Root of this Plant is very thick and fleſhy, and divides into ſeveral thick taper Roots, as large as a Man's Finger, covered with a reddiſh brown Bark, and is of a yellowiſh red Colour within; theſe ſtrike pretty deep into the Ground, and early in the Spring ſend up many Leaves, which at their firſt Appearance are cloſely folded up, but afterward expand. They are Heart-ſhaped, ſmooth, and have many deep Veins; their Borders are ſinuated and a little waved, and they are a little downy on their under Side: They are near Two Feet long, and a Foot and a Half broad at their Baſe, where they are rounded to the Footſtalk, and end in an obtuſe Point. The Footſtalks are Seven or Eight Inches long, riſing immediately from the Root: They are as large as a Man's Finger, flatted and channelled on their upper Side, but convex on their lower, of a purpliſh red Colour, and an acid Taſte. The Flowerſtalks ariſe immediately from the Root, between the Leaves; they are as large as a common walking Cane, and riſe Three Feet and a Half high, of a pale herbaceous Colour, and have ſeveral Joints: At each of theſe is placed One Leaf, of the ſame Shape with thoſe at Bottom, but ſmaller, and ſit cloſe to the Stalk, the Two Ears at their Baſe almoſt embracing it. The upper Part of the Stalk divides into ſmall Branches, which are again divided into Footſtalks, which are terminated by long cloſe Spikes of Flowers which divide into ſmaller; the Flowers are of a yellowiſh White within, having One Petal, which is divided into Six oval Segments at the Top, and within are Nine Stamina, nearly of the ſame Length, terminated by oblong Summits: Theſe ſurround the Germen, which is three-cornered, and is crowned by Three feathered Stigmas. After the Flowers fade, the Germen ſwells to a large three-cornered bordered Seed, ſhaped like thoſe of the Docks. This Plant flowers early in *June*, and the Seeds ripen in *Auguſt*.

As there is yet great Doubt which of the Species now growing in the *Engliſh* Gardens is the true Rhubarb, or if either of them is ſo, I ſhall not take upon me to determine this. All I can ſay at preſent is, that the Seeds of the Plant here figured were ſent me from the Academy of Sciences at *Peterſburgh* for the true Rhubarb, and a young Root, which I took up and dried, had more Appearance of the foreign Rhubarb, and approached nearer to it in Quality, than thoſe of any other Sort I have yet ſeen. But Dr. *Linnæus* has ſuppoſed another Species to be the true, which he titles *Rheum foliis ſubvilloſis, petiolis æqualibus. Sp. Plant.* 372. The Seeds of this Sort were ſent me in the Year 1734, by the late Dr. *Boerhaave* from *Leyden*, by the Title of *Rhabarbarum Chinenſe verum*; and afterward there were Seeds of the ſame brought to *England* by others, and the Plants have been cultivated by ſeveral Perſons in different Parts of *England*, but the Roots of this are not better than thoſe of the *Rhapontic*; ſo that I cannot believe that to be the true Rhubarb. I am alſo in Doubt if that is not a Variety, and not a diſtinct Specie; for from the Seeds of it there have been Plants produced, whoſe Leaves have been very different; and from Seeds of the *Rhapontic* I have raiſed ſome Plants which could not be diſtinguiſhed from that of *China* Rhubarb. However, it is to be hoped the Sort will be ſoon known, as there are many Perſons who are ſearching to find it.

PLATE CCXIX.

RICINUS, *Tourn. Inſt. R. H.* 532. *Tab.* 307. *Raii Meth. Plant.* 20. *Lin Gen. Plant* 962. Palma Chriſti, or Oil Seed; in *French*, Ricin.

THIS Genus of Plants is ranged in the Fifth Section of *Tournefort*'s Fifteenth Claſs, which includes the Herbs with Flowers having no Petals, growing ſeparate from the Fruit in the ſame Plant. Mr. *Ray* places it in his Fifth Claſs, which contains the Plants with ſtamineous Flowers, growing ſeparate from the Fruit on the ſame Plant. Dr. *Linnæus* ranges it in the Ninth Section of his Twenty firſt Claſs, which includes the Plants with Male and Female Flowers on the ſame Plant, whoſe Stamina are joined together in ſeveral Bodies.

The Characters of the Genus are,

It hath Male and Female Flowers, diſpoſed in the ſame Spike: The Male Flowers, which are ſituated in the lower Part of the Spike, have Empalements of One Leaf, cut into Three Parts, as is ſhewn at a; *theſe Segments are oval and concave: The Flowers have no Petals, but a great Number of ſlender Stamina, which are joined in various Bodies, terminated by roundiſh Twin Summits. The Female Flowers, which are ſituated on the upper Part of the Spike, have Empalements of One Leaf, which are cut into Five Segments, and are armed with Prickles on every Side, as is repreſented at* c. *Theſe Flowers have no Petals; but in the Center is ſituated an oval Germen, which is cloſely ſhut up in the Empalement* a, *ſupporting Three ſhort Styles, which are bifid, repreſented at* b, *ſtanding out beyond the Empalement. The Germina afterward turn to a roundiſh Fruit, with Three deep Furrows, having Three Cells, as is ſhewn at* d *and* e, *which in many of the Species are armed on every Side with Thorns, opening with Three Valves, as is repreſented at* f *and* g, *each Cell containing One oblong almoſt oval Seed, ſhaped like the Inſect called a Tick, repreſented at* h.

The Species here repreſented is,

RICINUS *foliis peltatis inæqualiter ſerratis, capſulis hiſpidis.* Ricinus with Target-ſhaped Leaves unequally ſawed, and prickly Capſules. This is the *Ricinus Americanus major, caule vireſcente. H. R. Par.* Greater *American* Palma Chriſti, with a greeniſh Stalk.

This Sort has been ſuppoſed to be only a Variety of the common *Ricinus*; but I have propagated it more than Thirty Years, and have never obſerved it to alter, ſo that I make no Doubt of its being a diſtinct Species: And as there has been no good Figure of this Plant yet exhibited, I have choſen to give one. The Plants of this Genus have been as ill diſtinguiſhed by Botaniſts, and as little known, as of any one Genus yet treated of; nor can they be aſcertained, unleſs they are conſtantly propagated, to ſee which of them will alter from Seeds: For ſure I am there are many diſtinct Species, which have not been noticed in any of the Books on Botany; ſeveral of which I have many Years propagated, and have always found they have continued without Variation. Dr. *Linnæus* has ſuppoſed there is but One Species of this Genus; and others have imagined there are not more than Three or Four; but whoever will be at the Trouble of collecting their Seeds, and propagating the Plants, will find there are many more.

This

This Sort grows naturally in the *Weſt Indies*. It is an annual Plant; the Stalk is thick, herbaceous, and of a greyiſh Colour; the Joints are not ſo far aſunder as thoſe of the common Sort: It riſes about Four Feet high, and divides at the Top into Three or Four ſmall Branches, which ſpread out horizontally. The Leaves are large, of a deep Green on their upper Side, but greyiſh on their under, and are deeply cut into Seven or Eight Spear-ſhaped Segments, which join at their Baſe. The Footſtalk is placed almoſt in the Center of the Leaf, where there is a Hollow like a Navel on the upper Side, from which Center ariſe the Midribs of the Segments, and from the Midribs there are many tranſverſe Veins, running to their Borders, where the Segments are unequally indented, like the Teeth of a Saw: The Footſtalks which ſuſtain the Leaves ſpread out more horizontally than thoſe of the common Sort, and are much ſhorter. The principal Stalk and alſo the Branches are terminated by looſe Spikes of Flowers; thoſe on the lower Part of the Spike are Male; theſe have ſmooth Empalements, which open and expoſe to View the great Number of Stamina which are collected into different Bodies, and are terminated by whitiſh oblong Twin Summits: Theſe Flowers fall away ſoon after they have caſt their Farina. The Female Flowers occupy the upper Part of the Spike; theſe have prickly Empalements, which are cloſely ſhut, ſo that no Part of the Flower is viſible but the Three Styles, which are ſtretched out beyond the Empalement, unleſs the Empalement is opened. The Male Flowers appear firſt, and then the Female come out above them; and theſe are ſucceeded by roundiſh Capſules, divided into Three Cells, each containing One oblong brown Seed, with ſome yellowiſh Marks. This Plant flowers in *July* and *Auguſt*, and, if the Autumn proves favourable, the Seeds will ripen in *October*.

PLATE CCXX.

RICINUS, *Tourn. Inſt. R. H.* 532. *Tab.* 307. *Raii Meth. Plant.* 20. *Lin. Gen. Plant.* 962. Palma Chriſti, or Oil Seed; in *French*, Ricin.

THIS being of the ſame Genus with the former, the Characters are the ſame; but as there are ſeveral Species of this Genus whoſe Empalements of the Flowers have no Prickles, ſo I have given a Figure of One of them, as there has been no Notice of this Difference in any of the Books, though it is permanent; for I have ſeveral Years cultivated Three Species, which have always proved the ſame without the leaſt Variation.

This is,

RICINUS *foliis peltatis ſerratis, capſulis rugoſis non echinatis.* Palma Chriſti with Target-ſhaped Leaves which are ſawed, and rough Capſules which have no Prickles.

This Sort grows naturally in the *Spaniſh Weſt Indies*, from whence I received the Seeds. This is alſo an annual Plant, which riſes with a thick herbaceous Stalk upwards of Four Feet high: The lower Part is of a purpliſh Colour, the upper Part of a deep Green; the Joints of this are farther aſunder than in the other Sort; the Leaves are of a deeper Green on their upper Side, but are paler on their under. The Segments of the Leaves have their Edges more regularly ſawed. The Male Flowers have a greater Number of Stamina; their Empalements are cut into Three Parts, which are of a yellow Colour, and the Seed-Veſſels are larger, oval, and have no Prickles. Theſe Differences are permanent.

Fig. *a*, *a*, repreſents the Male Flowers, One as they are ſituated on the lower Part of the Spike, the other is ſeparated from it, to ſhew the Empalement, which is cut into Three oval concave Segments. *b* ſhews the Female Flowers on the upper Part of the Spike, with the Three Styles ſtanding out beyond the rough Empalement *c*; theſe Flowers are ſucceeded by oval rough Fruit, repreſented at *d*, having Three deep Furrows which ſeparate the Three Cells, and have the Three Styles on the Top: Theſe outer Covers fall off, and diſcloſe a Nut with Three Cells repreſented at *e* and *f*, each Cell containing One oblong browniſh marked Seed, as is ſhewn at *g*. The Footſtalk of the Leaf is repreſented at *h*, as it is inſerted in the Middle of the Leaf; *i* ſhews One of the Segments with One of its Edges turned up; *k* ſhews a Leaf with its upper Surface fully expanded; and *l* ſhews one reverſed, withthe under Side outward.

PLATE CCXXI.

ROSA, *Tourn. Inſt. R. H.* 636. *Tab.* 408. *Raii Meth. Plant.* 144. *Lin. Gen. Plant.* 556. The Roſe; in *French*, Roſier.

THIS Genus of Plants is ranged in the Eighth Section of *Tournefort*'s Twenty-firſt Claſs, which includes the Trees and Shrubs with a Roſe Flower, whoſe Empalement becomes a Fruit with hard Seeds. Mr. *Ray* places it among the Apple-bearing Trees, with an umbilicated Fruit. Dr. *Linnæus* ranges it in the Fifth Section of his Twelfth Claſs, which includes thoſe Plants whoſe Flowers have from Twenty to Thirty Stamina, which are inſerted either into the Empalement or the Petals, and have many Styles.

The Characters of this Genus are,

The Empalement of the Flower is of One Leaf, which at the Baſe is of a globular Bell-ſhape, but is divided above into Five long narrow Segments, having an Appendix on each Side, as is repreſented at a: *The ſingle Flowers have but Five Petals, of a round Heart-ſhape, inſerted into the Empalement; but the double Flowers are compoſed of a great Number of Petals, of the ſame Shape as is ſhewn at* b: *In the Center are ſituated a great Number of ſhort Stamina, which are inſerted into the Necks of the Petals, terminated by Three-cornered Summits, repreſented at* c; *which are repreſented without the Petals at* d, e, *and* f. *In the Bottom of the Empalement* g *are ſituated many Germina, having each*

each a ſhort hairy Style inſerted in the Side of the Germen, crowned by obtuſe Stigmas, repreſented at i *and* k. *The Empalement afterward turns to a ſoft Fruit with One Cell, which is coloured when ripe, repreſented at* m. *The Fruit cut open lengthways is repreſented at* n, *and* o *ſhews One of the Seeds.* p *and* q *ſhew the Style, which at* p *is magnified, and* q *is of the natural Size.*

The Sorts here repreſented are,

Fig. 1. Rosa *rubra plena, ſpinoſiſſima, pedunculo muſcoſo. Boer. Ind. alt.* 2. *P.* 252. The moſt prickly double red Roſe, with a moſſy Footſtalk, commonly called the Moſs Provence Roſe.

This Roſe has not been many Years known in *England:* The firſt time I ſaw it was in the Year 1727, in the Garden of Dr. *Boerhaave* near *Leyden*, who was ſo good as to give me One of the Plants; but from whence it originally came I could not learn. It is probably a Variety which was obtained by Seeds from ſome other double Roſe; for I have frequently raiſed Roſes from Seeds, and have always found the Seeds of double Flowers produce others with double Flowers, and thoſe of ſingle Flowers always produced the ſame; but thoſe from the double Flowers produced Variety of different coloured Flowers, ſcarce any of the ſame Colour with thoſe of the Parent Plant. This Sort ſends out but few Stalks from the Root. Theſe are covered with a dark brown Bark, and cloſely armed with ſharp Thorns; the Leaves are compoſed of Five oblong oval Lobes, which are hairy and ſawed on their Edges; the Footſtalks of the Flowers are ſtrong, ſtanding erect, and are covered with a dark green Moſs, as is alſo the Empalement of the Flower. The Flowers are of the ſame Shape and Colour as the common *Provence* Roſe, and have the like agreeable Odour. It flowers in *June* and *July*; but is not ſucceeded by Fruit.

Fig. 2. Rosa *præneſtina, variegata plena. Hort. Eyſt.* The double variegated Roſe, commonly called the *York* and *Lancaſter* Roſe.

This is certainly a Variety of the Damaſk Roſe, the Plants being in Stalk, Leaf, and every Part the ſame, differing only in the Colour of the Flower, thoſe of this Sort being variegated with white Stripes, and the others are plain. There is another Variety of this which is called Mrs. *Hart*'s Roſe, which only differs in having the white Stripes more diſtinct. As the Flowers of this are leſs double than of many other Sorts, ſo they are frequently ſucceeded by Fruit, and have ripe Seeds, from which ſome Varieties may be obtained. The Stalks of this Sort riſe Six or Seven Feet high, and are ſo like thoſe of the Damaſk Roſe, as not to be diſtinguiſhed from it; ſo there needs no Deſcription of this, as the other is ſo generally known.

PLATE CCXXII.

Agave, *Lin. Gen. Plant.* 390. Aloe, *Tourn. Inſt. R. H.* 366. *Tab.* 191. *Raii Meth. Plant.* 117. Aloe; in *French*, Aloes.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Sixth Claſs, which includes thoſe Plants whoſe Flowers have Six Stamina and One Style. He ſeparates the Plants of this Genus from the Aloe, becauſe the Segments of the Petal are not reflexed, and the Stamina are twice the Length of the Petal; whereas thoſe of the Aloe are equal. *Tournefort* ranges it in the Second Section of his Ninth Claſs, which includes the Herbs with a Lily Flower of One Petal, cut into Six Parts, whoſe Empalement becomes the Fruit. Mr. *Ray* places it in the Second Section of his Twenty-third Claſs, which contains the Herbs with a Flower of One Petal, cut into Six Parts, ſitting upon the Top of the Fruit.

The Characters of this Genus are,

The Flower has no Empalement, as is ſhewn at a; *it hath One Funnel-ſhaped Petal, cut at the Top into Six equal Parts, which ſtand erect, as at* b. *It has Six ſlender erect Stamina, repreſented at* c, *which are twice the Length of the Petal, terminated by linear Summits, which may be turned round, repreſented at* d; *under the Flower is ſituated an oblong Germen* e, *which is narrowed at both Ends, ſupporting a Style the Length of the Stamina, as is ſhewn at* f, *crowned by a three-cornered Stigma, repreſented at* g: *The Germen afterward turns to an oblong three-cornered Capſule, as at* h, *opening in Three Cells, as is ſhewn at* i, *filled with a double Tier of flat Seeds, repreſented at* k.

The Species here repreſented is,

Agave *foliis anguſtioribus, dentato-ſpinoſis, ſcapo diviſo, ramis erectioribus.* Agave with narrower Leaves, whoſe Indentures have Spines, a divided Stalk, and erect Branches.

The Plant here repreſented flowered in the *Chelſea* Garden the laſt Summer, *Anno* 1757; and being a very different Species from the common *American* Aloe, and not mentioned in any of the Botanic Books, I have here given a Figure of it, hoping it will not be unacceptable to the curious: And as there have been many Figures and Deſcriptions of the common Aloe exhibited of late Years, ſo I ſhall only mention how this differs from that.

The Leaves of this are narrower, of a paler Green, and the Indentures on the Edges are not ſo deep; the Spines at the Indentures are ſhorter, and not ſo ſtrong: The Leaves do not grow ſo erect, and are drawn in much narrower toward their Points. The Stalk ariſes from the Center of the Plant, growing erect; this was Ten Inches in Circumference below, gradually diminiſhing like a Column, to the Height of Eight Feet, where it divided into ſeveral Branches: Thoſe in the Middle grew Three Feet high; the others were ſhorter; but they all grew erect: Whereas thoſe of the common Sort are horizontal, turning upwards at their Ends, like the Branches of a Chandelier. The Flowers of this were collected in cloſe Bunches or Cluſters, at the End of the Branches, ſtanding erect; but thoſe of the common Sort grow in Cluſters, from the Side of the Branches, and alſo at their Extremities: The Flowers of this are like thoſe of the common Sort, but are rather larger. The Stalk was about Six Weeks growing to its full Height; and the Flowers began to open about a Month after; a Succeſſion of them was continued near Six Weeks, and the Germina afterward grew to their full Size, many of them ſtill continuing upon the Plant, and may probably perfect their Seeds. There was another Singularity in this Plant, which was, many of the young Suckers from the Root flowered at the ſame time with the old Plant.

AGAVE, *foliis angustioribus, dentato-Spinoſis, Scapo, diviſi ramis erectioribus.*

J. Miller delin et Sculp

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PLATE CCXXIII.

RUBUS, *Tourn. Inſt. R. H.* 614. *Tab.* 385. *Raii Meth. Plant.* 156. *Lin. Gen. Plant.* 557. Raſpberry; in *French, Ronce.*

The Characters of this Genus are,

The Flower hath a permanent Empalement of One Leaf, cut into Five oblong Segments, which ſpread open, a; *it hath Five roundiſh Petals* b, *which are inſerted in the Empalement, and ſpread open*; *and a great Number of Stamina* c, *which are much ſhorter than the Petals, and are inſerted in the Empalement, terminated by roundiſh compreſſed Summits. It has a great Number of Germina, with ſmall Hair-like Styles on their Sides, crowned by permanent Stigmas. The Germina afterward become a Fruit, compoſed of many Acini* d, *collected in a convex Head, which is concave on the under Side*; *each Acinus* f, *has One Cell, containing One Kidney-ſhaped Seed* e.

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Twenty-firſt Claſs, which includes the Trees and Shrubs with a Roſe Flower, whoſe Pointal becomes a Berry, compoſed of ſeveral ſmall ones.

Mr. *Ray* places it among the Trees and Shrubs, whoſe Fruit is compoſed of many ſmall Acini or Berries.

Doctor *Linnæus* places it in the Fifth Section of his Twelfth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina, which are inſerted in the Empalement, and many Styles.

The Species here repreſented is,

RUBUS *foliis ſimplicibus palmatis, caule inermi multifolio multifloro, Lin. Hort. Cliff.* 192. Raſpberry with ſingle Hand-ſhaped Leaves, an unarmed Stalk with many Leaves and Flowers. This is the *Rubus odoratus, Corn. Canad.* 149. *Tab.* 150. Sweet *Canada* Raſpberry, commonly called the *Flowering Raſpberry.*

This Plant was firſt brought to *Europe* from *Canada*, where it grows naturally; as it alſo does in many other Parts of *North America.* The Root is perennial, and creeps far on every Side, ſending up many Stalks, ſo propagates itſelf very faſt; the Stalks riſe from Four to Seven Feet high, according as the Soil is ſtrong and moiſt, for in dry Ground they are but ſhort, and the Leaves ſmall, but in moiſt rich Land they will grow very tall. The Stalks are about the Size of a Man's little Finger, they are covered with a ſmooth Bark, of a light brown Colour, and branch out a little toward their Tops. The Leaves are Six Inches long, and Seven broad, cut into Three, Four, or Five angular Lobes, ending in acute Points, in ſome meaſure reſembling a Hand ſpread open. They are ſawed on their Edges, and have ſeveral Veins which ariſe from the Mid-rib, running upward diverging toward the Borders. The upper Sides of the Leaves are of a deep Green, but their under Sides are of a light Green and ſmooth; their Footſtalks are Four Inches long, and come out alternately from the Stalk. The Flowers are produced in looſe Bunches at the Top of the Stalks, each ſtanding upon a long Footſtalk; they are compoſed of Five large roundiſh Petals of a light purple Colour, which ſpread open like a Roſe, and within are ſituated a great Number of Stamina, which are inſerted in the Empalement, terminated by roundiſh compreſſed Summits. *c.* 1. is one of theſe Stamina of the natural Size, and *c.* 2. is one magnified. *b* repreſents one of the Germina magnified, and *d* ſhews one of the natural Size. After the Flower is decayed, the Germina ſwell to ſo many ſucculent ſmall Berries, repreſented at *f*, which are collected in a Head, as is ſhewn at *d*, in Shape like the common *Raſpberry.* This Plant begins to flower early in *July*, and there is commonly a Succeſſion of Flowers upon them till the Autumn; ſo that it is cultivated for the Sake of its Flowers, and is ſold among flowering Shrubs by the Nurſery Gardeners: For the Fruit is of little Value, having no Flavour; nor do the Plants always produce Fruit.

PLATE CCXXIV.

RUDBECKIA, *Lin. Gen. Plant.* 878. *Obeliſcotheca, Vaill. Act. Par.* 1720. *Bobartia, Pet. Muſ.* Dwarf Sunflower.

The Characters of this Genus are,

The common Empalement is compoſed of Two Orders of Leaves, which are ſhort and plain; *the Flower is compoſed of ſeveral female Half-Florets, which form the Rays or Border* b; *theſe are ſtretched out on one Side like a Tongue, and have One or Two Indentures at their Points. Theſe have a Germen under the Flower, which is abortive. The Hermaphrodite Flowers form the Diſk* c, *which is conical*; *they are ſmall, tubulous, and Funnel-ſhaped, indented in Five Parts at their Brim*; *theſe have Five Hair-like Stamina, terminated by cylindrical tubulous Summits. The Germen is ſituated in the common Empalement, ſupporting a ſlender Style, crowned with a revolved two-parted Stigma. The Germen afterward becomes a ſingle oblong four-cornered Seed, crowned by its proper Cup, which has Four Indentures.*

THIS Genus of Plants is ranged in the Third Section of *Linnæus*'s Nineteenth Claſs, which includes thoſe Plants whoſe Flowers are compoſed of Female Half-Florets, which are barren, and form the Rays or Border; and the Diſk is formed of Hermaphrodite fruitful Flowers.

The Species here repreſented, Fig. 1. is,

RUDBECKIA *foliis lanceolato-ovatis alternis indiviſis, petalis radii integris, Flor. Virg.* 181. Rudbeckia with oval Spear-ſhaped Leaves, which are entire and alternate, and the Rays of the Flower are entire. This is the *Chryſanthemum helenii folio, umbone floris grandiuſculo prominente, Pluk. Alm.* 99. *Tab.* 242. Corn Marygold with an Elecampane Leaf, and the Middle of the Flower large and prominent. Doctor *Dillenius* titles it, *Obeliſcotheca integrifolia, radio aureo, umbone atro-rubente, Hort. Elth.* 295. *Tab.* 218. Obeliſcothea with an entire Leaf, yellow Rays to the Flower, and a dark-red Middle.

This Plant grows naturally in *North America*; the Root is perennial; the Leaves are oval, hairy, and entire; they are about Four Inches long, and Two broad in the Middle; the Stalks are ſingle, a Foot high, having Two or Three Leaves toward the Bottom, which are placed alternate; the Stalks are terminated by One Flower, ſhaped like a ſmall Sun-flower, compoſed of ſeveral yellow Petals or Rays, which are entire; and the Diſk or Middle of the Flower is very prominent, which is compoſed of many hermaphrodite Florets, of a dark-red, or purple Colour. The Flowers appear in *July*, and there is a Succeſſion of them on the Plants, till the Froſt ſtops them.

The other Plant, Fig. 2. although by the alphabetical Order obſerved in this Work, it is at a great Diſtance from the Firſt, yet, according to the Characters of the Flowers is very near allied to it, and being a Plant not yet figured, we have added it here.

This is the Coreopsis *foliis linearibus integerrimis, caule erecto, Flor. Virg.* 181. Coreopſis with linear entire Leaves, and an erect Stalk.

The Characters of this Genus are,

The common Empalement is double; the outer one a *is rough, and the inner ſcaly; the Flower is compoſed of Female Tongue-ſhaped Half-Florets* b, *which form the Rays, and Diſk of hermaphrodite Florets* d; *the Female Half-Florets have a Germen* c, *but no Style or Stigma; the hermaphrodite Florets have Five ſhort Hair-like Stamina, terminated by cylindrical Summits, and a compreſſed Germen, ſupporting a ſlender Style, crowned by a bifid Stigma; the Germen afterward turns to a ſingle four-cornered Seed* f, *having a membranaceous Sheath* e *ſurrounding it.*

This Genus of Plants is ranged in the Third Section of *Linnæus*'s Nineteenth Claſs, which includes thoſe Plants whoſe Flowers are compoſed of female barren Flowers, and hermaphrodite Flowers, which are fruitful.

This Plant grows naturally in *Virginia*, and other Parts of *North America*; the Root is fibrous, but does not continue long, ſeldom ſurviving Two Years. The Stalk is erect and ſmooth; it riſes a Foot and a Half high, dividing upward into many ſmaller Branches; it is garniſhed with narrow rough Leaves *g*, which are Three Inches long, ſet oppoſite without Footſtalks. The Branches divide again at the Top into long ſlender erect Footſtalks, each ſuſtaining One yellow radiated Flower, compoſed of Female Half-florets, which are the Rays or Border of the Flower, and a convex Diſk or Middle of a dark purple Colour, compoſed of hermaphrodite Florets. This Plant flowers in *Auguſt* and *September*, but unleſs the Seaſon proves very favourable, the Seeds will not ripen in *England*.

PLATE CCXXV.

Salvia, *Tourn. Inſt. R. H.* 180. *Tab.* 83. *Raii Meth. Plant.* 58. *Lin. Gen. Plant.* 36. Sage; in *French*, *Sauge.*

The Characters of this Genus are,

The Empalement of the Flower a *is tubulous, of One Leaf, which enlarges upward, and is cut into Four Parts at the Brim. The Flower is of one Petal, divided into Two Lips* b *and* c; *the upper Lip* b *is concave, compreſſed, incurved, and a little indented at the Point. The lower Lip* c *is broad, reflexed, and for the moſt part trifid. It hath Two Stamina terminated by proſtrate Summits* d, *and a quadrifid Germen ſupporting a long ſlender Style* e, *crowned by a bifid Stigma. The Germina afterward become Four naked Seeds* f, *ſitting in the Bottom of the Empalement* g. *Theſe Seeds are repreſented at* h, *taken out of the Empalement.*

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Fourth Claſs, which includes the Herbs with a Lip Fower of One Petal, whoſe upper Lip is hollow like a Helmet, and arched. Mr. *Ray* places it in the Firſt Section of his Fourteenth Claſs, which contains the Plants with woody perennial Stalks, whoſe Flowers grow in Whorles. Doctor *Linnæus* ranges it in the Firſt Section of his Second Claſs, which includes thoſe Plants, whoſe Flowers have Two Stamina and One Style. This is an Example of one Imperfection in his Syſtem; for by ranging the Plants according to the Number of Stamina in their Flowers, he has ſeparated a Claſs, which by all former Syſtems was judiciouſly kept entire, a Part of which are here placed in his Second Claſs; and the greater Part of the Genera compoſe the Firſt Section of his Fourteenth Claſs, the Flowers of thoſe having Two long and Two ſhorter Stamina.

The Species here repreſented are,

Fig. 1. Salvia *foliis ſubrotundis ſerratis, baſi truncatis dentatis, Hort. Cliff.* 18. Sage with roundiſh ſawed Leaves, whoſe Baſe is truncated and indented. This is the *Salva Africana frute ſcens, folio ſcorodoniæ, flore violaceo, Hort. Amſt.* 2. p. 181. Shrubby *African* Sage, with a Wild Sage Leaf, and a Violet Flower.

This grows naturally at the *Cape of Good Hope*, from whence it was brought to the Gardens in *Holland*, about Fourſcore Years ago, and hath ſince been diſperſed to moſt of the curious Gardens in *Europe*. It riſes with a ſhrubby Stalk Four or Five Feet high, dividing into many Branches, which are garniſhed with oval ſawed Leaves, which have One or Two Indentures at their Baſe, which appear as if they were torn. The upper Leaves are more entire and much ſmaller, ſitting cloſe to the Branches; they are greyiſh, and have ſmall Leaves coming out juſt above their Footſtalks. The Flowers come out toward the End of the Branches, at each Joint, in the ſame Manner as the other whorled Flowers; but there is ſeldom more than Two at the ſame Joint, One on each Side the Stalk, and often but One: Theſe are ſhaped like thoſe of the common Sage, having a hooked upper Lip, and a recurved lower Lip, which is broad, and indented in Three Parts at the End, the middle Segment being larger than the other. The Flowers are of a bright blue Colour, having Two long Stamina, which are terminated by oblong Summits lying proſtrate, faſtened in the Middle to the Stamina; theſe lie under the upper Lip of the Flower; and with theſe ariſes a long hooked Style, crowned by a ſlender Stigma. After the Flower is paſt, the Four Germina become Four naked Seeds ſitting in the Bottom of the Flower-cup. This Plant continues flowering from *June* to *October*; and the early Flowers are often ſucceeded by Seeds, which ripen in the Autumn.

Fig. 2. Salvia *foliis oblongo-ovatis integerrimis, calycibus patulis coloratis.* Sage with oblong-oval entire Leaves, and ſpreading coloured Empalements to the Flower.

This Sort I received from *Holland* without any Title, but that of a *new Sage from the Cape*. It has a great Reſemblance of the Firſt, but the Shoots are ſtronger, the Leaves longer, and not ſo broad; the Flowers grow chiefly at the End of the Branches, and the principal Stalks terminate in a Sort of looſe Panicle of Flowers. The Empalement of the Flower is large, entire, and of a pale blue Colour, ſpreading open flat; ſo that after the Flowers are fallen, theſe have the Appearance at a ſmall Diſtance of a Bell-ſhaped Flower. This Plant continues

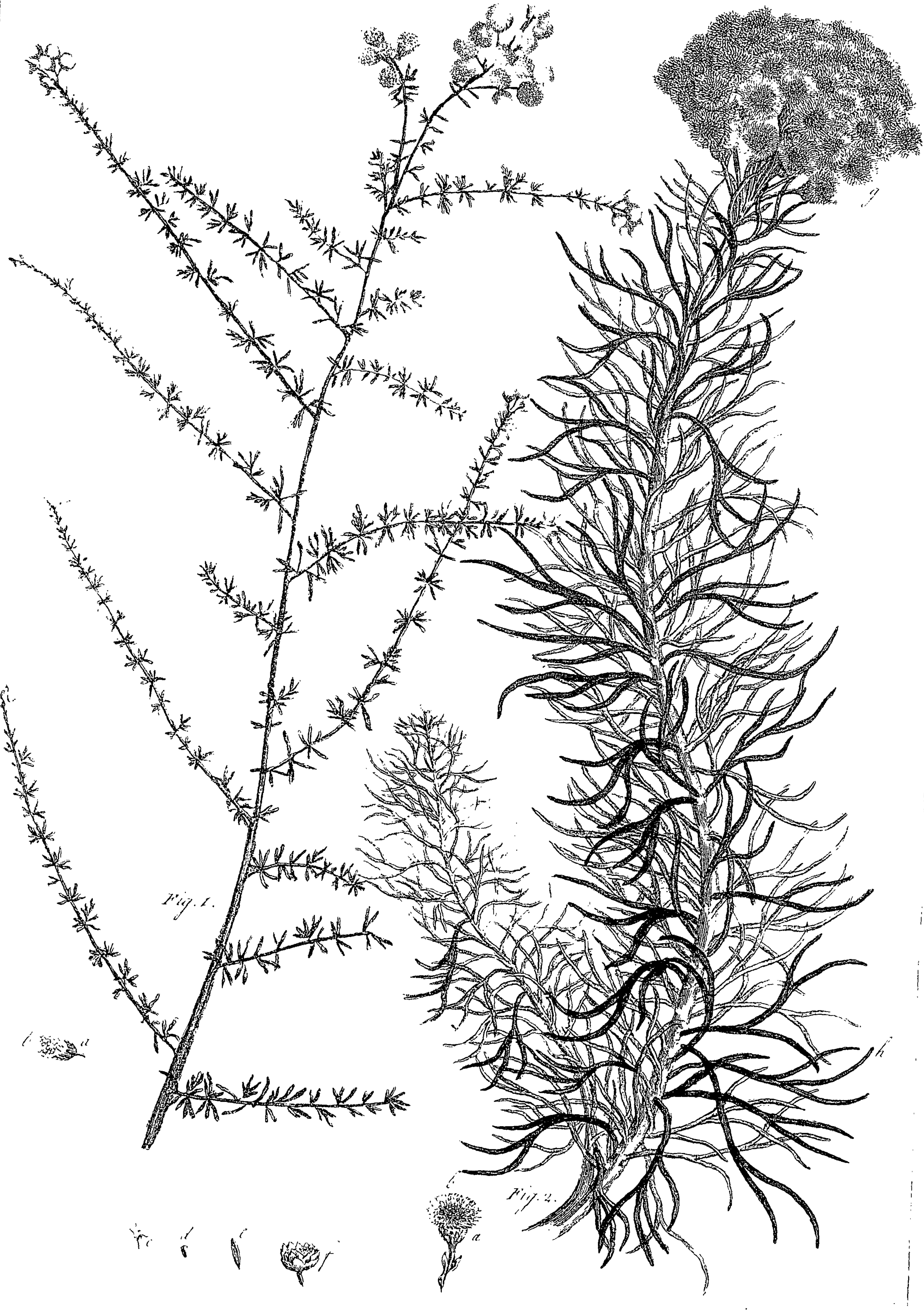

Fig. 1. **SANTOLINA**, *corymbis ſimplicibus faſtigiatis, foliis linearibus confertis*

Fig. 2. **SANTOLINA**, *corymbis ſimplicibus faſtigiatis, foliis ſemitrifidis linearibus Lin. Sp. pl. 843.*

R. Lancake delin.

J. Miller Sculp.

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in flower great Part of the Summer; but it has not ripened Seeds here.

This is ſuppoſed to be only an accidental Variety of the Firſt Sort which has riſen from Seeds. It may be ſo. All I can ſay of it is, that the Seeds of this came from the *Cape of Good Hope* a few Years paſt, as a new Sort; and alſo, that I have frequently raiſed Plants of the Firſt Sort from Seeds, but have never found any Variation in them.

PLATE CCXXVI.

SAMBUCUS, *Tourn. Inſt. R. H.* 606. *Tab.* 376. *Raii Meth. Plant.* 145. *Lin. Gen. Plant.* 334. Elder; in *French*, *Sureau.*

The Characters of this Genus are,

The Flower hath a ſmall permanent Empalement a, *which is of One Leaf, cut into five Parts at the Top. The Flower* b *is of the concave Wheel Shape, of One Petal, which is obtuſe, five-pointed, and reflexed. It hath Five Awl-ſhaped Stamina* c, *which are terminated by roundiſh Summits* d, *and an oval obtuſe Germen* e, *ſituated under the Flower, having no Style, but a bellied Glandule crowned by Three obtuſe Stigmas. The Germen afterward turns to a roundiſh Berry* f, *with One Cell, incloſing Three angular Seeds* g, *which are convex on their outer Side.*

THIS Genus of Plants is ranged in the Sixth Section of *Tournefort*'s Twentieth Claſs, which includes the Trees and Shrubs with a Flower of One Petal, whoſe Empalement turns to a Berry. Mr. *Ray* places it among the Trees with an umbilicated Fruit or Berry, incloſing ſeveral Seeds. Doctor *Linnæus* ranges it in the Third Section of his Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and Three Styles.

The Species here repreſented is,

SAMBUCUS *caule herbaceo ramoſo, foliolis dentatis.* Elder with a branching herbaceous Stalk, and the Lobes of the Leaves indented. This is the *Sambucus humilis ſive Ebulus, C. B. P.* 456. Dwarf Elder or Ebulus. *John Bauhin* titles it, *Ebulus ſive Sambucus herbacea, Hiſt.* 1. 546. Doctor *Linnæus* calls it in his Species of Plants, *Sambucus cymis tripartitis, ſtipulis foliaceis*, 269. Elder whoſe Tops divide in Three Parts, and a leafy Stipula. It is titled in the Shops *Ebulus* and *Chamæacte.* In *Engliſh*, Dwarf Elder, Danewort and Walwort.

This Plant grows naturally in *England*, particularly in *Bedfordſhire*, *Northamptonſhire*, and *Leiceſterſhire*, where it is frequently a troubleſome Weed in the Corn-fields. It hath a creeping Root, which ſpreads far under the Surface of the Ground. The Stalks riſe from Three to Five Feet high, according as the Soil is where it grows. Theſe are garniſhed with winged Leaves, compoſed of Six or Seven Pair of Lobes, terminated by an odd one; they are about Four Inches long, and One broad near their Baſe, but end in acute Points; they are of a deep Green, indented a little on their Edges, and ſtand by Pairs. The upper Parts of the Stalks branch out, and are terminated by large Umbels of whitiſh Flowers tipp'd with Purple; they have One Petal, which is cut into Five obtuſe Segments; theſe are reflexed backward, and Five Stamina, which ſpread open upon the Segments, with an oval Germen in the Center, which afterward turns to a roundiſh Berry, which when ripe is black, and filled with a purple Juice. At the ſetting on of the Leaves, there are ſeveral ſmall Leaves ſet cloſe to the Footſtalks repreſented at *h*, which Doctor *Linnæus* titles *Stipulæ*. The Plant flowers in *July*, and the Seeds ripen in *September*. This Plant is uſed in Medicine; it purges ſerous watery Humours by Stool, and is therefore much recommended for the Dropſy, in which Diſorder I have known the Juice of it taken Three Times a Week, Two Spoonfuls at each Time, perform Wonders. It is alſo eſteemed good for the Gout, and ſcorbutic Diſorders.

The tender Shoots of the *Common Elder-Tree* are frequently ſold in the Markets for this, from which it may be eaſily diſtinguiſhed by the Number and Shape of the Lobes on each Leaf. The common Elder having rarely more than Two Pair of Lobes, which are broad and ſhort when compared to this, which has ſeldom leſs than Five, and frequently Seven Pair of Lobes terminated by an odd one.

PLATE CCXXVII.

SANTOLINA, *Tourn. Inſt. R. H.* 460. *Tab.* 260. *Baccharis, Vaill. Act. Par.* 1719. *Coma aurea, Com. Hort. Amſt.* 2. *p.* 99. Lavender Cotton, or Goldylocks; in *French*, *Garderobe.*

The Characters of this Genus are,

It hath a common hemiſpherical Empalement a, *which is ſcaly. The Flower is compoſed of many hermaphrodite Florets* b, *which are uniform and longer than the Empalement. Theſe are Funnel-ſhaped* c, *and cut into Five Parts at the Top, which ſpread open; they have Five very ſhort Hair-like Stamina, terminated by cylindrical Summits, and a three-cornered oblong Germen* d, *ſupporting a ſhort ſlender Style, crowned by Two oblong, torn, depreſſed Stigmas. The Germina afterward become ſo many oblong three-cornered Seeds* e, *crowned by a ſhort Down, ſitting upon the concave plain Bed* f, *incloſed in the Empalement.*

THIS Genus of Plants is ranged in the Third Section of *Tournefort*'s Twelfth Claſs, which includes the Herbs with a floſculous Flower, whoſe Seeds have a Down. Doctor *Linnæus* places it in the Firſt Section of his Nineteenth Claſs, which contains thoſe Plants whoſe Flowers are compoſed of Hermaphrodite fruitful Florets only.

The

The Species here repreſented are,

Fig. 1. Santolina *corymbis ſimplicibus faſtigiatis, foliis linearibus confertis.* Lavender Cotton with ſingle Heads of Flowers gathered in Bunches, and linear Leaves in Cluſters. This is the *Coma aurea abrotani folio annua, Ponted.* Annual Goldylocks with the Leaf of Southernwood.

This Plant grows naturally on the *African* Side of the *Mediterranean*; it is annual; the Stalks riſe about Two Feet high; they are ſtiff, but herbaceous, ſending out many Side Branches their whole Length; thoſe from the lower Part of the Stalks are Four or Five Inches long, but they are gradually ſhorter to the Top. The Leaves come out in ſmall Cluſters from the Joints; they are very narrow and ſhort; ſome of theſe end in Three Points, others are ſingle: The Branches are terminated by Cluſters of Flowers of a bright Yellow, each Corymbus ſtanding on a ſhort Footſtalk; the common Empalement is oval and ſcaly; the Flowers are compoſed of a great Number of hermaphrodite Florets, which are longer than the Empalement; they are equal in Size, and have each Five ſhort Stamina. Theſe Flowers appear in *Auguſt*, and continue till the Froſt deſtroys them; but the Seeds do not ripen in *England*. The whole Plant has a fine aromatic Scent.

Fig. 2. Santolina *corymbis ſimplicibus faſtigiatis, foliis ſemitrifidis linearibus, Lin. Sp. Plant.* 843. Lavender Cotton with ſingle Heads of Flowers in Bunches, and linear Leaves, which are half their Length trifid. This is the *Coma aurea Africana fruticans, foliis crithmi marini, Hort. Amſt.* 2. *p.* 99. Doctor *Plukenet* titles it, *Jacobæa Æthiopica, foliis abrotani trifidis, ſummo caule capitulis parvis glomeratis, Alm.* 194. *Ethiopian* Ragwort, with trifid Southernwood Leaves, and ſmall Heads in Bunches at the Top of the Stalks.

This Sort grows naturally at the *Cape of Good Hope*, but has been long an Inhabitant of the curious Gardens in *Europe*. It riſes with a ſhrubby Stalk Five or Six Feet high, cloſely garniſhed the whole Length, with narrow Leaves about Two Inches long, which are divided half their Length into Three Parts, as is repreſented at *h*; they are of a grey Colour, and are a little ſucculent. The Flowers grow in large Cluſters at the End of the Branches, as is ſhewn at *g*; theſe are of a deep yellow Colour, and are continued in Succeſſion moſt of the Summer Months; but the Seeds do rarely ripen in *England*.

PLATE CCXXVIII.

Kalmia, *Lin. Gen. Plant.* 482. *Chamærhododendros, Tourn. Inſt. R. H.* 604. *Tab.* 373. The Roſe Laurel, or Mountain Laurel.

The Characters of this Genus are,

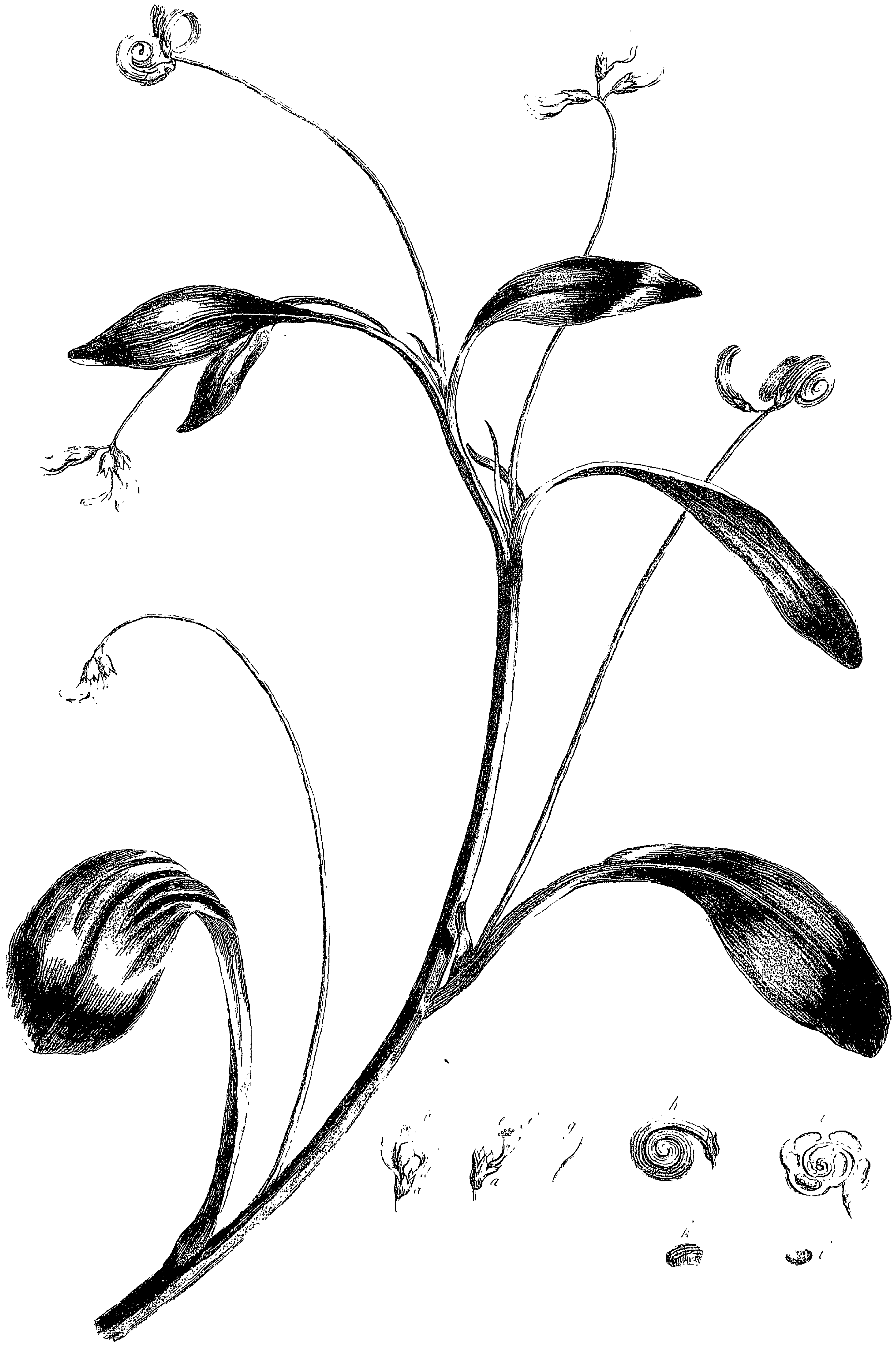
The Empalement of the Flower is ſmall, permanent, and cut into Five roundiſh Segments a, *which ſpread open; the Flower is of One Petal, with a very ſhort Tube, ſpreading open, and cut into Five roundiſh Segments* b; *it hath Ten Awl-ſhaped Stamina* c, *which ſpread and riſe upward, terminated by roundiſh Summits* d. *In the Center of the Flower is ſituated an oval Germen, ſupporting a Style longer than the Petal* e, *crowned by an obtuſe Stigma. The Germen afterward becomes an oblong Capſule* f, *having Five Cells* g, *which are filled with ſmall Seeds* h.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Tenth Claſs, which includes thoſe Plants whoſe Flowers have Ten Stamina, and One Style. *Tournefort* places it in the Fourth Section of his Twentieth Claſs, which contains the Trees and Shrubs with a Flower of One Petal, whoſe Pointal becomes a Capſule with ſeveral Cells.

The Species here repreſented is,

Kalmia *foliis lanceolato-ovatis nitidis ſubtus ferrugineis, floribus corymboſis terminalibus.* Kalmia with neat Spear-ſhaped oval Leaves, of a ruſty Colour on their under Sides, and Flowers in round Bunches terminating the Branches. This is the *Chamærhododendros lauri folio ſempervirens, floribus bullatis corymboſis, Cateſb. Car.* 3. *p.* 17. Dwarf Roſe Bay, with a Bay-leaf Ever-green, and ſtudded Flowers in round Bunches. Doctor *Linnæus* titles it, *Rhododendron foliis nitidis ovalibus, margine acute reflexo, Sp. Plant.* 392. Roſe Bay, with neat oval Leaves, whoſe Borders are acutely reflexed. Commonly called in *America, Roſe Laurel,* or *Mountain Laurel.*

This grows naturally upon Rocks and barren Soils in many Parts of *North America*, where it riſes with a ſhrubby Stalk Fifteen or Sixteen Feet high, ſending out a few Branches toward the Top, which are garniſhed with ſtiff, ſmooth Leaves, Six Inches long, and Two broad, of a lucid Green on their upper Side, and pale on their under Side while young, but afterward change to a ruſty Iron Colour: They have ſhort thick Footſtalks, and are placed without Order; at the End of the Branches between the Circle of Leaves, the Buds for flowering are formed, which ſwell during the Winter and Spring Months, till the Beginning of *June*, when the Flowers burſt out from their Covers, and form a roundiſh Bunch (or Corymbus) ſiting cloſe to the Branch; the Flowers have but One Petal, which is cut almoſt to the Bottom, into Five obtuſe roundiſh Segments, One of which hath many Protuberances or Studs; ſome of theſe are yellow, others green, and ſome are purpliſh and hairy; the Petal is of a pale Colour. When the Flowers are paſt, the Germen becomes an oblong Veſſel with Five Cells; but theſe do not ripen here. This Shrub, in its native Country, continues flowering great Part of the Summer, and is a great Ornament to the barren Rocks; and if it could be got to thrive well in *England*, it would be one of the greateſt Ornaments here. As this was the Firſt Shrub of the Kind which has flowered in *England*, we have given a Repreſentation of it, though it is out of the Order we have obſerved in this Work.



SCORPIURUS, *pedunculis subbifloris, leguminibus extrorsum spinis distinctis undique obtusis.* Lin. Sp. plant. 745.

R. Lancake delin.

J. Miller Sculp.

Publish'd according to Act of Parliament [illegible] 1758

PLATE CCXXIX.

SCOLYMUS, *Tourn. Inſt. R. H.* 480. *Tab.* 273. *Raii Meth. Plant.* 31. *Lin. Gen. Plant.* 826. Golden Thiſtle.

The Characters of this Genus are,

It hath a Flower compoſed of ſeveral Florets, included in One common oval imbricated Empalement a, *the Scales of which are looſe, and end in acute Points: The Florets are equal and hermaphrodite; they have One Tongue-ſhaped Petal* b, *which is indented at the Top; and Five ſhort Hair-like Stamina included in the Tube, terminated by cylindrical Summits. The Germen* c *is ſituated under the Floret, ſupporting a ſlender Style* d, *which is longer than the Stamina, crowned by two reflexed Stigma's. The Germen* e *afterward becomes an oblong ſingle Seed pointed at the Baſe* f, *incloſed in a convex Chaff* g, *which is roundiſh, ending in Three Points.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Thirteenth Claſs, which includes the Herbs with a ſemifloſculous Flower, whoſe Seeds have no Down.

Mr. *Ray* places it in the ſecond Section of his ſixth Claſs, which contains the Herbs with a compound Flower, having ſolid Seeds without Down.

Doctor *Linnæus* ranges it in the Firſt Section of his Nineteenth Claſs, which includes thoſe Plants whoſe Flowers have only fruitful Florets, and their Stamina are connected with the Style.

The Species here repreſented is,

SCOLYMUS *foliis margine incraſſatis, Lin. Sp. Plant.* 813. Golden Thiſtle with the Borders of the Leaves thicker than the Middle. This is the *Scolymus Chryſanthemus, C. B. P.* 384. Scolymus with a Golden Flower. *Cluſius* titles it *Scolymus Theophraſti Hiſpanicus, Hiſt.* 2. *p.* 153. Theophraſtus's Spaniſh Scolymus. *John Bauhin* calls it *Spina lutea, Hiſt.* 3. *p.* 24. Yellow Thorn. And *Dodonæus* titles it, *Carduus Chryſanthemus. Pempt.* 725. Golden Thiſtle.

This Plant grows naturally in *Spain, Italy,* and the *South of France.* It has a perennial Root, which is compoſed of many ſtrong Fibres, which ſtrike deep in the Ground, from which ariſe many long narrow Leaves, which are ſinuated on their Edges, each Sinus ending with a very ſharp Spine. They are of a whitiſh Green, and firm Texture; their Borders being the thickeſt Part, they turn backward toward the Ground. From between the Leaves the Flower ſtalks ariſe, which grow from Three to Four Feet high; they are garniſhed their whole Length with Leaves of the ſame Form with thoſe at the Bottom, whoſe Baſes run along the Stalk, forming leafy Borders or Wings which run from one to the other; theſe are alſo indented, the Sides of each Indenture being armed with Spines. The upper Part of the Stalk divides into Two or Three herbaceous Branches, which are cloſely garniſhed with the ſame long prickly Leaves, and each is terminated by a large golden Flower, compoſed of ſeveral Florets which are Tongue-ſhaped, and very like thoſe called by *Tournefort* and others Half-florets, which are generally female; but theſe are hermaphrodite, each having both Sexes, and are fruitful. The Flowers ſit very cloſe to the End of the Branch, and are ſo cloſely guarded by long Leaves, which are armed with ſtrong Spines, that it is very troubleſome to reach the Flower. The Scales of the common Empalement do alſo end with Spines, ſo that it is difficult to get the Seeds when they are ripe.

This Plant flowers in *July* and *Auguſt,* and, if the Seaſon proves dry, the Seeds will ripen the End of *September*; but if much Rain happens during the time of its Flowering, the Wet lodges in the Empalement about the Germen, and cauſes them to rot, and become abortive. The Roots of this will continue ſeveral Years, and may be propagated by Off-ſets from the Root.

The Leaves, Stalks, and Root, of this Plant, abound with a milky Juice. The People of *Salamancha* eat this Plant, in the ſame manner as *Chardon*; and the *Spaniards* ſophiſticate their Saffron with the Flowers of this Plant.

PLATE CCXXX.

SCORPIOIDES, *Tourn. Inſt. R. H.* 402. *Tab.* 226. *Raii Meth. Plant.* 106. *Scorpiurus, Lin. Gen. Plant.* 792. Caterpillar, *in French, Chenille.*

The Characters of this Genus are,

The Empalement of the Flower is erect, of One Leaf, and blown up, lightly compreſſed, and cut into Five Points, which are acute a. *The Flower is of the Butterfly Kind, having a roundiſh Standard indented at the Top* b, *and the Edges reflexed and ſpreading. The Wings* c *are almoſt oval, looſe, and have a blunt Appendage. The Keel* d *is Half-moon-ſhaped, the Belly gibbous, the Point erect, and divided in Two Parts below; it has Ten Stamina, Nine of which are joined together* e, *and One ſtands ſeparate* f, *which are riſing upward, and terminated by ſmall Summits. It hath an oblong taper Germen, which is reflexed, ſupporting an inflexed Style* g, *terminated by a pointed Stigma. The Germen afterward becomes an oblong, taper, leathery Pod, which is channelled, rough, and twiſted round* h, *divided lengthways into ſeveral Cells* i, *and on the Outſide contracted into Joints ſlightly* k, *each Cell containing One Kidney-ſhaped Seed* l.

THIS Genus of Plants is ranged in the Third Section of *Tournefort*'s Tenth Claſs, which includes the Herbs with a Butterfly Flower, whoſe Pointal becomes an articulated Pod.

Mr. *Ray* places it in the Second Section of his Twenty-firſt Claſs, in which he places the Herbs with ſingle Leaves which have a Butterfly Flower.

Doctor *Linnæus* ranges it in the Third Section of his Seventeenth Claſs, which includes thoſe Plants whoſe Flowers have Ten Stamina joined in Two Bodies.

The Species here repreſented, is,

SCORPIURUS *pedunculis ſubtrifloris, leguminibus extorſum ſpinis diſtinctis acutis, Lin. Sp. Plant.* 745. Caterpillar with Three Flowers on a Footſtalk, and the Outſide of the Pods armed with acute Spines which are diſtinct. This is the *Scorpioides bupleuri folio, C. B. P.* 287. Caterpillar with a Hare's ear Leaf. *Dodonæus* titles it, *Scorpioides prius, Pempt.* 71. The firſt Caterpillar.

This Plant grows naturally in *Spain*, *Sicily*, and other warm parts of *Europe*; but has been cultivated in the *Engliſh* Gardens by way of Curioſity, rather than any Beauty; the Pods, when green, having ſo much the Appearance of Caterpillars, that many People have taken them for ſuch, feeding upon the Plant.

It is an annual Plant; the Root is compoſed of many Fibres, which are long, ſlender, and of a yellowiſh Colour. The Stalks are herbaceous, and ſpread on the Ground; they are a Foot and Half long, ſucculent and thick, and are garniſhed with pretty thick Leaves, having long Footſtalks which are bordered; the Leaves are Two Inches long and Three Quarters broad, ending with an obtuſe Point, and have ſhort Hairs over their Surface. From the Wings of the Stalk came out the Footſtalks of the Flowers, which are Eight or Nine Inches long, very ſlender, ſuſtaining at the Top Three yellow Flowers of the Butterfly or Pea-bloom Kind, which are ſucceeded by ſlender contorted Pods, which have a few diſtinct ſhort Spines on their outer Side. They are firſt green; and, before they are twiſted, have the Appearance of Green Caterpillars, ſo that they have been frequently taken for thoſe Inſects feeding upon the Plants.

It flowers in *June* and *July*, and the Seeds ripen in the Autumn. It is called *Scorpiurus*, from the Pod having the Reſemblance of a *Scorpion's Tail*.

PLATE CCXXXI.

SCROPHULARIA, *Tourn. Inſt. R. H.* 166. *Tab.* 74. *Raii Method. Plant.* 89. *Lin. Gen. Plant.* 674. Figwort. In *French*, *Scrofulaire*.

The Characters of this Genus are,

The Empalement of the Flower is permanent, of One Leaf, cut into Five Parts a, *which are ſhort and roundiſh; the Flower hath One unequal Petal, having a large globular Tube which is ſwollen: The upper Part is cut into Five Segments; the Two upper Segments* b *are large and erect, the Two Side-ones* c *are ſpread open, and the lower is reflexed; it hath Four ſhort ſlender Stamina, which are deflexed, Two being ſhorter than the other, terminated by twin Summits, and an oval Germen* d, *ſupporting a ſlender Style* e, *crowned by a ſingle Stigma. The Germen afterward turns to a roundiſh, acute-pointed Capſule* f, *having Two Cells* g, *opening at the Top with Two Valves, and divided by an intermediate Partition* h, *filled with ſmall Seeds faſtened to the roundiſh Receptacle* i.

THIS Genus of Plants is ranged in the Third Section of *Tournefort's* Third Claſs, which includes the Herbs with an anomolous Flower of one Petal, ſpreading on both Sides.

Mr. *Ray* places it in the Second Section of his Nineteenth Claſs, in which is contained the Herbs with an irregular or difformed Flower of One Petal, whoſe Seeds are included in Capſules.

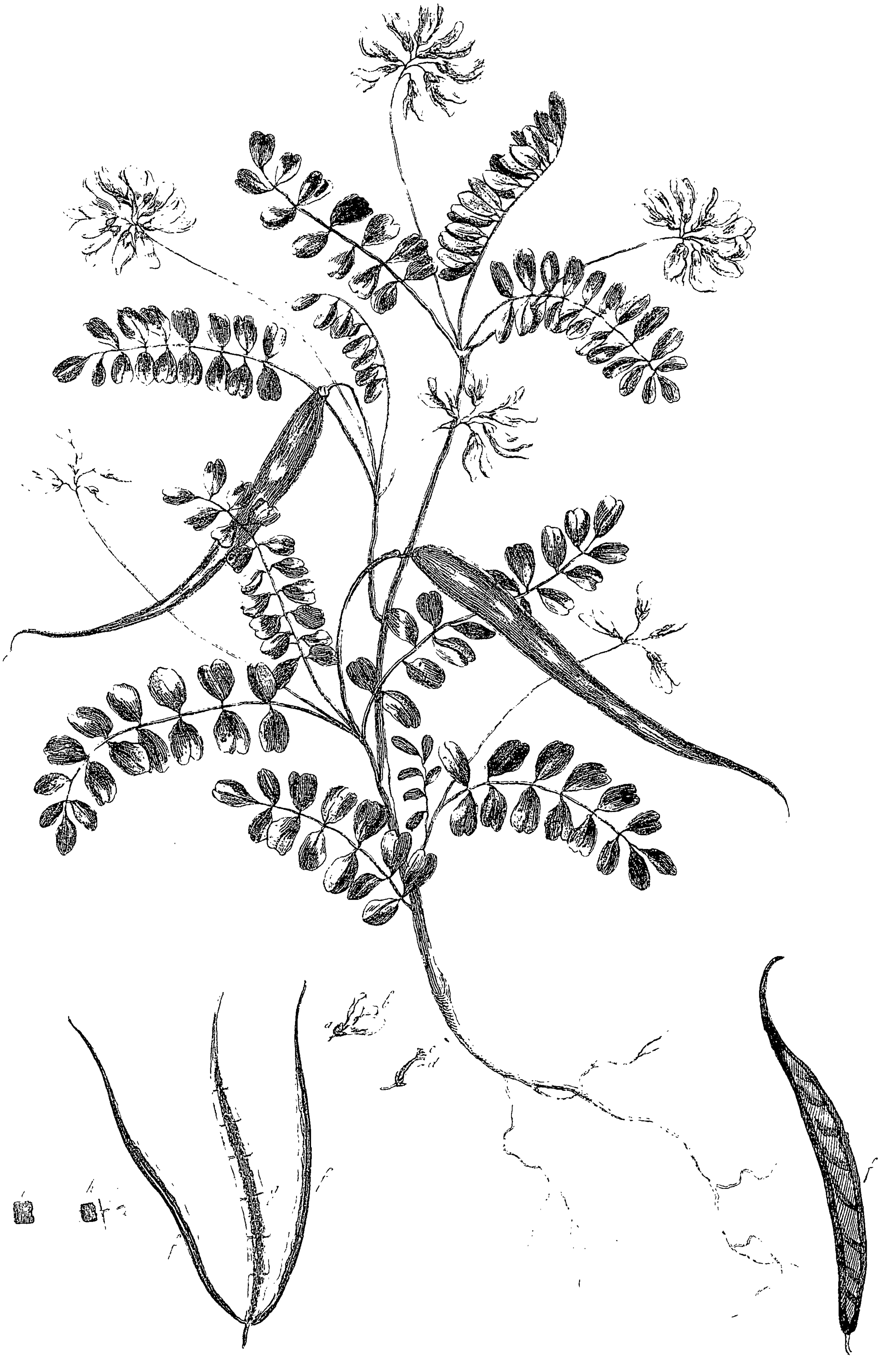
Doctor *Linnæus* ranges it in the Second Section of his Fourteenth Claſs, which includes thoſe Plants whoſe Flowers have Two long and Two ſhort Stamina, and the Seeds are included in Capſules.

The Species here repreſented is,

SCROPHULARIA *foliis difformibus glabris, pedunculis axillaribus aggregatis.* Figwort with difformed Leaves which are ſmooth, and Footſtalks growing in Cluſters from the Wings of the Stalk. This is the *Scrophularia Hiſpanica, Sambuci folio glabro, Tourn. Inſt.* 166. Smooth Alder-leaved Spaniſh Figwort. And the *Scrophularia Sambuci folio, Park. Theat.* 611. Alder-leaved Figwort. Doctor *Plukenett* titles it, *Scrophularia Sambuci folio, flore rubro luteo vario pulchro, Alm.* 388. Figwort with an Alder Leaf, and a red-yellow and variable Flower.

This Plant grows naturally in *Spain* and *Portugal*; and in the latter there is another Sort like this, but it is much larger, the Leaves and Stalks are hairy, and the Flowers of a paler Colour, which has been often confounded with this; but I have cultivated both Sorts more than Thirty Years, and have not found them alter.

The Roots of this Plant grow very thick at their Crown, and have many ſtrong Fibres of a dark Colour, which ſtrike deep in the Ground; from which ariſe ſeveral four-corned Stalks abut Two Feet and a Half high, ſending out a few ſhort Side Branches toward the Bottom. They are garniſhed with Leaves at each Joint, placed oppoſite, which are of irregular Figures: They have ſeveral Lobes like winged Leaves, of different Sizes, terminated by an odd one; theſe are irregularly ſawed on their Edges, ending in acute Points: Their Surface is ſmooth, of a lucid green, but their under Side is paler. They have pretty long Footſtalks, and, when they are bruiſed, have a ſtrong Scent of Alder. The Flowers come out from the Side of the Stalk at each of the upper Joints in Cluſters, each ſtanding upon a ſeparate ſlender Footſtalk, and have the Appearance of whorled Flowers. They have ſome Reſemblance to the Lip Flowers, having a ſhort ſwelling Tube, of an irregular Shape, cut at the Top into Five irregular Segments; the Two upper are the longeſt, theſe ſtand erect; the Two Side ones are broad and ſpread open, and the lower is ſhort and reflexed. They are variable, having ſome red, yellow, and green Spots in each; ſo that when the Plants are ſtrong and thriving they make a good Appearance. This flowers the latter End of *May* and the Beginning of *June*, and the Seeds ripen in *Auguſt*. The Roots will laſt Two or Three Years with Care.



SECURIDACA, *lutea major* C. B. P. 398.

[illegible] del. et Sc.

J. Miller Sculp.

Publish'd according to Act of Parliament by P. Miller May 20. 1758.

PLATE CCXXXII.

SECURIDACA, *Tourn. Inſt. R. H.* 399. *Tab.* 224. *Raii Meth. Plant.* 105. *Coronilla, Lin. Sp. Plant.* 743. Hatchet-Vetch.

The Characters of this Genus are,

The Flower has a ſhort permanent Empalement of One Leaf, indented in Four Parts at the Brim a; *the Petal is of the Butterfly Kind* b; *the Standard is Heart-ſhaped, and but little longer than the Wings; the Two Borders are reflexed. The Wings are oval, erect, and draw toward each other; the Keel is compreſſed, and a little ſhorter than the Wings. The Flower has Ten Stamina, Nine of which* c *are joined, and One* d *ſtands ſeparate. They riſe almoſt in a right Angle, and are terminated by obtuſe Summits. It hath a taper Germen* e, *ſupporting a ſhort Style crowned by an obtuſe Stigma. The Germen afterward turns to a long compreſſed Pod* f, *having a plain Suture on one Side, but narrow on the other, ending in an acute Point, opening with Two Valves* f f, *having a longitudinal Partition* g, *and divided into Joints* h, *each containing One ſquare Seed* i.

THIS Genus of Plants is ranged in the Third Section of *Tournefort*'s Tenth Claſs, which includes the Herbs with a Butterfly Flower, whoſe Pointal turns to a jointed Pod.

Mr. *Ray* places it in the Second Section of his Twenty-firſt Claſs, which contains the leguminous Herbs with ſingle-jointed Pods. Doctor *Linnæus* joins this Plant to his Genus *Coronilla*, which is ranged in the Third Section of his ſeventeenth Claſs, which includes thoſe Plants whoſe Flowers have Ten Stamina joined in Two Bodies.

The Species here repreſented is,

SECURIDACA *lutea major, C. B. P.* Greater yellow Hatchet-Vetch. This is the *Securidaca vera, Cluſ. Hiſt.* 236. The true Hatchet-Vetch. *John Baubin* titles it, *Securidaca flore luteo, ſiliquâ latâ oblongâ, Hiſt.* 2. 245. Hatchet-Vetch with a yellow Flower, and a broad oblong Pod. Doctor *Linnæus* titles it, *Coronilla herbacea, leguminibus ſalcato-gladiatis, Hort. Cliff.* 363. Herbaceous jointed-podded Colutea, with Sickle Sword-ſhaped Pods.

This is an annual Plant which grows naturally amongſt the Corn in *Spain*, but is frequently cultivated in Gardens for the ſake of Variety. The Root is compoſed of a few ſlender Fibres, which run pretty deep in the Ground, from which come out ſeveral Stalks a Foot and a Half long, which divide into ſeveral Branches, and lie upon the Ground. Theſe are garniſhed with ſmooth winged Leaves, compoſed of Seven or Eight Pair of Lobes, terminated by an odd one; the innermoſt Lobes are the largeſt, the other diminiſhing in their Size to the End; theſe are oval, obtuſe, and indented at their Points, and cloſe together every Evening, or in wet Weather. The Footſtalks of the Flowers ariſe from the Wings of the Leaves; they are ſlender, Four or Five Inches long, and ſuſtain ſeveral yellow Flowers, growing in a Kind of Umbel at the Top; they are of the Pea-bloom Kind, and appear in *July*. They are ſucceeded by compreſſed Pods near Four Inches long, having a plain Suture on one Edge, but the other is ſharp, ending in an acute Point; theſe are a little bent like a Sickle, but are ſhaped like a Broad Sword. They have ſeveral Joints, which are ſeparated by thin Partitions, in each of which is lodged One ſquare Seed; the Pods open with Two Valves lengthways. It has this Title from the Shape of the Seeds, which are like the *Securis* of the Antients.

PLATE CCXXXIII.

SENECIO, *Boerh. Ind. alt.* 117. *Conyza, H. L.* 661. *Tourn. Inſt. R. H.* 455. *Tab.* 259. Groundſel.

The Characters are,

The Empalement of the Flower a—a *is concealed and ſcaly. The Scales are placed over each other, like thoſe of Fiſh, and have no Spines at their Ends. The Flower is compoſed of ſeveral Florets* b, *which are longer than the Empalement. Theſe are tubulous and Funnel-ſhaped* c *and* d, *and their Brim is cut into Five Segments which ſpread open* i. *The hermaphrodite Florets have an oval Germen* d, *crowned with Down* e, *ſupporting Two ſlender Styles the Length of the Petal, crowned by oblong erect Stigma's. They have Five very ſhort Stamina* h, *ſituated within the Tube of the Flower, terminated by oblong Summits. The Germen afterward turns to an oval ſeed* d, *crowned with long Down.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Twelfth Claſs, which includes the Herbs with a floſculous Flower, whoſe Seeds are crowned with Down.

Mr. *Ray* places it in his Seventh Claſs, which contains the Herbs with a diſcous Flower and downy Seeds. Indeed this Plant, by its Characters, ſeems to be *ſui generis*, for it differs in ſeveral Things from the *Senecio* according to *Linnæus*'s Syſtem, tho' it comes the neareſt to that and the *Baccharis* of any of his Genera, which induced me to place it there; but as moſt of the Flowers are hermaphrodite, and theſe have Two Styles, the few that are male are very ſmall, and are intermixed with the hermaprodite Florets, ſo in theſe reſpects it differs from the Senecio.

The Plant here repreſented is,

SENECIO *Africanus, folio retuſo, H. Cath.* African Groundſel with a blunt-pointed Leaf. This is the *Conyza Africana, Senecionis flore, retuſis foliis, H. L. Tourn. Inſt. R. H.* 455. African Fleabane with a Groundſel Flower and blunt-pointed Leaves; and is probably the *Pſeudo-helichryſum fruteſcens, Africanum, retuſis foliis viridibus, flore luteo nudo, Mor. Hiſt.* 3. 90. Shrubby African baſtard Goldylocks, with green blunt-pointed Leaves and a naked yellow Flower.

This Plant grows naturally at the *Cape of Good Hope*, but has been long cultivated in the curious *European* Gardens.

Gardens. It is a perennial Plant, having a thick fibrous Root, from which ariſe ſeveral herbaceous hairy Stalks, near Four Feet high, which put out ſeverel Side Branches, and are garniſhed with hairy Leaves about Two Inches long, and a Quarter of an Inch broad toward their Points, where they are broadeſt; diminiſh gradually to their Baſe, where they are narroweſt, and ſit cloſe to the Stalks. They come out from the Side of the Stalk and Branches in Cluſters, ſeveral of them riſing from the ſame Point, and without Order on every Side. They are of a deep Green on their upper Side, and pale on their under, continuing all the Year. The upper Part of the Stalk divides into ſeveral Footſtalks, each of which is terminated by a Sort of Umbel compoſed of golden Flowers; theſe are of the compound Kind, having many hermaphrodite Florets, included in One common Empalement which is ſcaly. Theſe appear late in the Autumn, and continue in Beauty all the Winter, fading in the Spring, and are ſometimes ſucceeded by oval Seeds crowned with Down, which ripen in *England.*

The Stalks of this Plant generally decay the ſecond Year, which are ſupplied by new which come from the Root; ſo that until the young ones are grown to a good Height, the old remain with their green hairy Leaves in Vigour.

PLATE CCXXXIV.

SERRATULA, *Dill. Nov. Gen.* 8. *Hort. Elth.* 261—264. *Raii Meth. Plant.* 40. *Lin. Gen. Plant.* 831. Saw-wort.

The Characters of this Genus are,

The common Empalement of the Flower a *is imbricated, cylindrical, and bellied. The Scales are ſpear-ſhaped, acute-pointed, and unarmed. The Flower is compoſed of ſeveral hermaphrodite Florets* h, *which are uniform and equal; theſe are of One Petal, Funnel-ſhaped, and the Brim* d *is cut into Five Segments, which ſpread open; they have Five ſhort Hair-like Stamina, terminated by cylindrical Summits* f, *which coaleſce. The Germen is oval and crowned* i, *ſupporting a long ſlender Style* k, *crowned by oblong Stigma's* c. *The Germen afterwards turns to a ſingle Seed* e, *crowned with Down ſitting in the Empalement.*

THIS Genus of Plants is ranged in Mr. *Ray*'s Ninth Claſs, which includes the Herbs with a compound Flower collected into Heads, whoſe Florets are long, and cut into Segments.

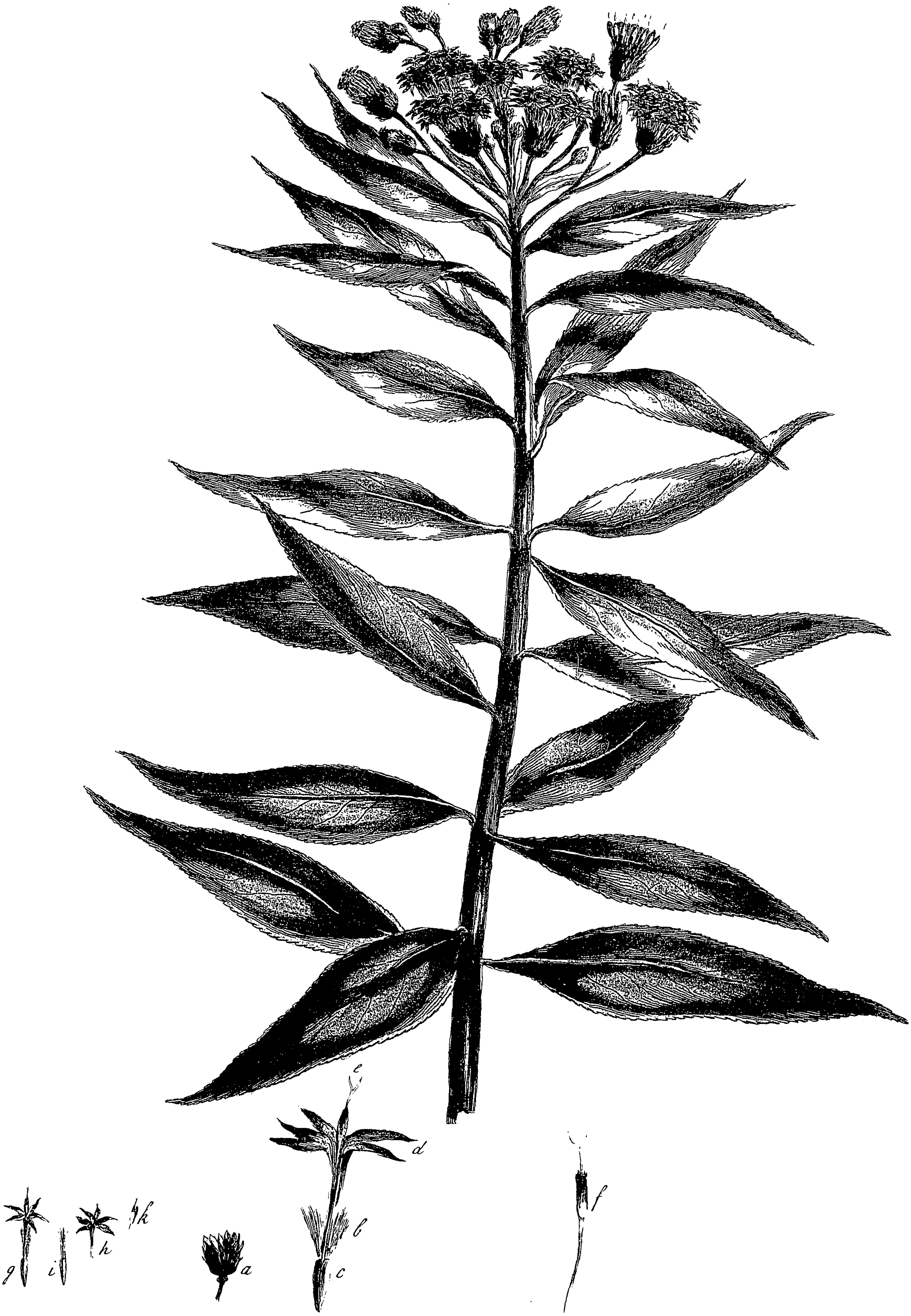
Doctor *Linnæus* places it in the Firſt Section of his Nineteenth Claſs, which contains thoſe Plants whoſe Flowers are compoſed of hermaphrodite or fruitful Florets, and their Stamina and Style are connected.

Tournefort places the Species of this Genus under his Genus of *Jacea* or Knapweed, which is ranged in the Firſt Section of his Twelfth Claſs, which includes the Herbs with Flowers compoſed of ſeveral Florets.

The Species here repreſented is,

SERRATULA *foliis lanceolato-oblongis ſerratis patentibus, ſubtus hirſutis, Lin. Sp.* d *Plant.* 818. Saw-wort with Spear-ſhaped oblong ſawe Leaves, which ſpread out, and are hairy on their Under-ſide. This is the *Serratula præalta, anguſto plantaginis aut perſicæ folio, Bocc. Muſ.* 2. *p.* 45. *Tab.* 32. Taller Saw-wort with a narrow Plaintain or Peach-Tree Leaf. *Tournefort* titles it, *Jacea nemorenſis altiſſima, Perſicæ folio, Inſt. R. H.* 444. Talleſt Wood Knapweed with a Peach-Tree Leaf, *p.* 1. Doctor *Dillenius* calls it *Serratula Virginiana, perſicæ folio ſubtus incano, Hort. Elth.* 356. Virginia Saw-wort with a Peach-Tree Leaf, hoary on the Under-ſide.

This Plant grows in *Virginia, Carolina, Penſylvania,* and moſt other parts of *North America.* It hath a large perennial Root, compoſed of many ſtrong Fibres, which ſtrike deep into the Ground; the upper Part of the Root is formed into Heads, which become ligneous, and are cloſely joined together, and by Age grow to a large Size, from which come out ſeveral ſtrong herbaceous Stalks of a purpliſh Colour, which in good Ground riſe to the Height of Seven or Eight Feet. Theſe are garniſhed with Spear-ſhaped oblong Leaves, about Three Inches long, and One broad in the Middle, drawing to a Point at each End. They are of a deep Green on their upper Side, and a little hoary on their under, ſawed a little on their Edges, and ſit cloſe to the Stalk, ſtanding on every Side withour Order, and ſpread open horizontally. The Stalks are terminated by looſe Bunches of Flowers ſtanding erect, almoſt in Form of an Umbel, each ſtanding upon a ſlender Footſtalk Two or Three Inches long. They are compoſed of ſeveral hermaphrodite Florets of a purple Colour, ſitting in One common ſcaly Empalement. Theſe appear in *Auguſt*; and, if the Autumn proves warm and dry, they are ſucceeded by Seeds which ſometimes ripen in *England.* The Stalks decay in Winter, and new ariſe in the Spring; but the Roots will continue ſeveral Years, and, as they increaſe in Size ſend up a greater Number of Stalks.



SERRATULA, *foliis lanceolato-oblongis ſerratis patentibus ſubtus hirſutis Lin. Sp. plant. 818.*

J. Miller delin et Sculp.

Publishd according to Act of Parliament by P: Miller May 25.1758.

In this Number, we have taken the Liberty to exhibit the Figures of ſome Plants which have been lately introduced into the Engliſh *Gardens from the* Cape of Good Hope. *As theſe Plants are new, and have not been figured in any of the Botanick Books, ſo we hope their Repreſentation here will be agreeable to our Subſcribers; and although they break into the Order we propoſed at our firſt ſetting out, yet we are in hopes we ſhall be excuſed in this Digreſſion.*

PLATE CCXXXV.

GLADIOLUS, *Tourn. Inſt. R. H.* 365. *Tab.* 190. *Raii Meth. Plant.* 117. *Lin. Gen. Plant.* 55. Cornflag; in *French*, *Glaieul*.

The Characters of this Genus are,

The Flower is incloſed in a vague Sheath a; *it hath One Petal, which is cut into Six Parts at the Top* b; *the Three upper Segments are near together* c; *the Tube is incurved, and the Three under ſpread open. It has Three Stamina, repreſented at* c, *terminated by oblong Summits. The Germen is ſituated under the Flower, ſupporting a long ſlender Style* d, *crowned by a trifid Stigma* e. *The Germen afterwards becomes an oblong Capſule, which is bellied in the Middle, repreſented at* i; *which is Three-cornered, opening with Three Valves, as at* f, *having Three Cells, repreſented at* g, *which are filled with roundiſh-bordered Seeds* h.

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Ninth Claſs, which includes the Herbs with a Lilly Flower of One Petal, cut into Six Parts, whoſe Empalement becomes the Fruit.

Mr. *Ray* places it in the Second Section of his Twenty-third Claſs, which contains the Graſs-leaved flowering Plants of One Petal, cut into Six Parts, which ſit on the Top of the Fruit.

Doctor *Linnæus* ranges it in the Firſt Section of his Third Claſs, which includes thoſe Plants whoſe Flowers have Three Stamina and One Style.

The Species here repreſented are,

Fig. 1. GLADIOLUS, *foliis linearibus ſulcatis, floribus alternis petalis acutioribus.* Cornflag with linear furrowed Leaves, Flowers placed alternate, and acute Segments to the Petals of the Flower.

This Plant hath a bulbous Root, repreſented at *k*, from which come out Two or Three narrow Leaves, a Foot and Half long, having a longitudinal Furrow in the Middle, and ending in acute Points. They are of a deep Green, and ſtand erect. Between theſe ariſe a ſlender taper Stalk, about the ſame Length as the Leaves, having One or Two ſhort acute-pointed Leaves on the lower Part, whoſe Baſe embraces the Stalk. The upper Part is garniſhed with Flowers, which are placed alternate, at a Diſtance from each other, coming out of a Spatha, or Sheath, which alſo embraces the Stalks with their Baſe. Theſe Spathæ are permanent, drying upon the Stalk, and incloſing the Capſule after the Flower is paſt. The Tube of the Flower is curved downward, and not ſo long as moſt of the other Species. The upper Part is cut into Six acute Segments, which are nearly equal in their Size. The Flower is of a pale yellow or ſulphur Colour; the Stamina are long, erect, and are terminated by long pyramidal Summits of a dirty White; the Style is ſlender, and terminated by a trifid reflexed Stamina. The Germen, after the Flower fades, ſwells to an oblong bellied Capſule with Three Corners, having Three Cells, which open with Three Valves, filled with roundiſh bordered Seeds. It flowers the End of *May*, and the Seeds ripen about Six Weeks after.

Fig. 2. GLADIOLUS *foliis linearibus ſulcatis, floribus uno verſu diſpoſitis, tubo floris longiore.* Cornflag with linear furrowed Leaves, and Flowers ranged on one Side the Stalk, which have longer Tubes.

This hath a bulbous Root like the former; the Leaves have alſo a great Reſemblance to thoſe of the other Sort; the Stalk is ſlender, and has more Leaves upon it than the former, and is embraced by their Baſe. The Flowers are ranged on one Side the Stalk towards the Top, ſtanding pretty far aſunder. The Spathæ, or Sheaths, which incloſe the Flowers, are long, of One Leaf opening on one Side, and are permanent. The Flower is curved; the Petal is cut almoſt to the Bottom into Six Parts or Segments, which are almoſt of equal Size, and end in blunt Points; the lower Segments turn downward, the upper are erect and ſpread open. The Flower is of a pale bluiſh Colour, approaching to White; each Segment is marked with a broad purple Line in the Middle, which is divided. The Three Stamina are ſituated near the lower Segment of the Petal; theſe are terminated by purpliſh oblong Stamina, which are erect. The Style is of the ſame Length with the Stamina, and is crowned by a trifid reflexed Style. The Flowers of this Sort have an agreeable Odour. They appear the latter End of *May*, and the Seeds ripen in *July*. Both theſe Plants were raiſed in the *Chelſea* Garden, from Seeds which came from the *Cape of Good Hope*, and have this Year produced their Flowers.

PLATE CCXXXVI.

Fig. 1. GLADIOLUS *foliis linearibus planis, ſpatha glabra acutiſſima.* Cornflag with plain linear Leaves, and a ſmooth acute-pointed Sheath to the Flower.

THIS hath a flatted bulbous Root, covered with a netted Skin, repreſented at *k*. The young Bulbs, or Offsets, are formed at the Extremity of the Fibres, which is contrary to all the other Species of this Genus. The Leaves are Fifteen Inches long, but are very narrow and plain, ending in acute Points. They are of a light Green, and ſtand erect. The Stalk riſes between the Leaves, and is nearly of the ſame Length. This is crooked at each Joint, where there is ſituated a ſhort plain acute Leaf, embracing the Stalk with its Baſe. The Flowers come out of ſmooth acute-pointed Sheaths, marked *a*, which are permanent, and cover the upper Side of the Tube of the Flower; and, when that decays, become a Cover to the Capſule. The lower Part of the Tube is narrow, the Chaps are ſwollen, and the upper Part is cut into Six Segments; the Three outer Segments are long, and broader than the other, as is repreſented at *b*. Theſe form the Standard, and are reflexed backward, ſpreading from each other. The Two Side Segments *c*, are narrow and ſpread open; they have a yellow Mark at their Baſe, tipped with a bright Purple. The middle or lower Segment is broader than the Two Side, and in the Boſom of this is ſituated the Stamina and Style. The Three Stamina, ſhewn at *d*, are crooked in the ſame Form as the Tube of the Flower; they are ſhort, of a pale Fleſh Colour, and are terminated by oblong Summits, repreſented at *e*, which are faſtened in the Middle to the Apex of the Stamina. The Style is longer, and is crowned by a trifid reflexed Stigma, ſhewn at *f*. The Flower is of a pale Fleſh Colour, and appears in *May*; when that decays, the Germen ſwells to an oblong Three-cornered bellied Capſule, repreſented at *h*, having Three Cells, as is ſhewn at *g*, filled with roundiſh bordered Seeds *i*, which ripen the End of *June*. This Plant is alſo a Native of the *Cape of Good Hope*, and was raiſed from Seeds in the *Chelſea* Garden.

Fig. 2. IXIA *foliis linearibus glabris, caule folioſo bulbifero.* Ixia with ſmooth linear Leaves, and a leafy Stalk bearing Bulbs.

The Characters of this Genus, and the Claſs in which it is ranged, having been exhibited in a former Number, we ſhall not repeat it here.

The Root of this Plant is bulbous, and has a netted Coat; the Stalk riſes a Foot and a half high, and is garniſhed with plain ſmooth Leaves at each Joint, whoſe Baſe embraces the Stalk. They are of a lucid Green, and differ greatly in their Size. The Flowers are produced toward the Top of the Stalk, each having a ſhort withered Spatha, or Sheath, which divides on both Sides, and is permanent. The Flower has Six Spear-ſhaped Petals, of equal Size, which ſpread open, and end in acute Points; they are white within, having a pale purpliſh Stripe down the Middle; but they have broad deep purple Stripes on their Outſide. Their Baſe is marked with a yellow Spot. There are Three Stamina in the Middle, which are terminated by oblong yellowiſh Summits, and a trifid Style, which is reflexed. The Stalks have Bulbs formed at each Joint at the Baſe of the Leaves, which, when planted, becomes a new Plant. It flowers in *May*, and the Stalks decay in *June*.

PLATE CCXXXVII.

Fig. 1. IXIA *foliis gladiolatis nervoſis, ſpatha lacera.* Ixia with Sword-ſhaped veined Leaves, and a torn Sheath to the Flower.

THIS hath a bulbous Root, with a fibrous Cover, from which riſes a Stalk about Five or Six Inches high, garniſhed with Sword-ſhaped Leaves, about Four Inches long and half an Inch broad, having ſeveral longitudinal Veins. They are of a pale Green, broad at the Top, and end in acute Points. Theſe embrace the Stalks with their Baſe. The Stalk is bent at each Joint, and is terminated by Two or Three Flowers ſtanding at a little Diſtance from each other. Theſe have a permanent Empalement, which ſeems torn into ſeveral narrow Segments, as is repreſented at *a*, which wither, and lie over the Seed Veſſel after the Flowers fade. The Flower is compoſed of Six obtuſe Petals, equal in Size, as is ſhewn at *b*. They are of a beautiful Purple on their Outſide, but are white within. They have Three ſhort Stamina, repreſented at *c*, terminated by oblong Summits faſtened in the Middle to the Apex of the Stamina, and a long Style, marked *d*, crowned by a trifid reflexed Stigma *e*. After the Flower is paſt, the Germen turns to an oval Capſule *f*, having Three Furrows, and divided by Partitions into Three Cells, as is ſhewn at *g*, which open with Three Valves *h*, and are filled with roundiſh Seeds, *i* and *k*. This flowers the Beginning of *May*, and the Seeds ripen in *June*.

Fig. 2. IXIA *foliis gladiolatis glabris, ſpatha breviore quinquefido.* Ixia with ſmooth Spear-ſhaped Leaves, and a ſhort Five-pointed Sheath to the Flower.

The Root of this Plant is bulbous and ſmooth; the Stalk riſes Four Inches high, and is garniſhed with ſmooth Sword-ſhaped Leaves near Four Inches long, whoſe Baſe embraces the Stalks. They are broad at the Top, but have an acute Point at the End. The Stalk is terminated by Two large Flowers, compoſed of Six Petals, equal in Size, which ſpread open, and are obtuſe. The Outſide of the Petals is of a Violet Colour, edged with White; the Inſide is of a pale Blue. They have Three Stamina and One Style, like thoſe of the other Sorts. It flowers in *May*.

Fig. 3. IXIA *foliis gladiolatis glabris, caule unifloro.* Ixia with ſmooth Sword-ſhaped Leaves, and a Stalk with One Flower.

This hath a flatted bulbous Root, covered with a rough Coat, from which come out Five or Six Sword-ſhaped ſmooth Flowers: Some of theſe are Five or Six Inches long, but others are not more than Three; they are narrower at their Baſe, but broader toward their End, which are acute-pointed. The Footſtalk of the Flower is naked about Four Inches along, ariſing immediately from the Root, and is terminated by One Flower, whoſe Sheath is torn, withered, and ſituated at a ſmall Diſtance below the Flower, encompaſſing the Germen. The Petals of the Flower are Spear-ſhaped, ending in Points. They are of a moſt beautiful purple Colour both within and without. The Stamina are ſhort; but the Summits, which are faſtened to their Apices, are long, and of a dirty white Colour. The Style is much longer, and is crowned by a trifid Stigma, which is reflexed. It flowers towards the End of *May*.

Theſe Plants were raiſed from Seeds in the *Chelſea* Garden, which were brought from the *Cape of Good Hope*.

PLATE CCXXXVIII.

MOREA.

The Characters of this Genus are,

It hath an oblong acute-pointed Spatha, or Sheath, which is permanent, and compoſed of Two Leaves a. *The Flower has Six Spear ſhaped Petals, which ſpread open, plain, and are connected at the Baſe. Theſe are alternately larger than the other* c. *It has Three erect bifid Petals, which encompaſs the Stamina and Style* d; *and Three very ſhort Stamina terminated by oblong Summits, which are erect. The Germen is ſituated under the Flower* b, *and ſupports a ſhort Style* e, *crowned by Three bifid Stigmas* f, f, f. *The Germen afterwards becomes an oval Capſule* g, *having Three longitudinal Furrows, and divided into Three Cells* h, *which open with Three Valves* i *and* k, *and are filled with roundiſh Seeds* l.

I Have taken the Liberty of conſtituting this Genus of Plants, and applying of this Title to it, in Honour of *Robert More*, Eſquire, of *Shropſhire*, who is a very learned Gentleman, and well acquainted with moſt Branches of Natural Hiſtory, particularly with Botany.

This Genus, according to *Linnæus*'s Syſtem, muſt be ranged in the Firſt Section of his Third Claſs, which includes thoſe Plants whoſe Flowers have Three Stamina and One Style: And, by *Tournefort*'s Method of claſſing the Plants, it muſt be placed in the Second Section of his Ninth Claſs, which includes the Herbs with a Lilly Flower of One Petal, cut into Six Parts, whoſe Empalement becomes the Fruit.

The Species here repreſented are,

Fig. 1. MOREA *ſpatha biflorâ, caule planifolio, floribus minoribus.* Morea with Two Flowers in each Sheath, plain Leaves on the Stalk, and ſmaller Flowers.

This Plant hath a bulbous Root, ſhaped like that of the *Crocus*, repreſented at *m*, which is renewed annually; the young Root being formed on the Top of the old one, which decays when the Stalk and Leaves die away. The Stalk riſes about a Foot high; it is taper, is of a Purple Colour at the Bottom, and is garniſhed with narrow plain Leaves, which embrace the Stalk with their Baſe. They are more than a Foot long, and Half an Inch broad at their Baſe, ending in acute Points, repreſented at *n*, of a deep green Colour, and flaccid. The Flowers are produced at the Top of the Stalks, coming out of a Two-leaved Sheath, ſhewn at *a*, which is ſmooth and acute-pointed. Two Flowers are contained in each. The Footſtalk of the Flower riſes above the Sheath, ſuſtaining an oblong Germen *b*; upon which ſits the Flower *c*, which is compoſed of Six Petals, marked *c*, or of One Petal cut into Six Parts to the Bottom, where they ſeem connected. Theſe are Spear-ſhaped, every other being larger than the intermediate ones. They are of a faded blue Colour, and the Tail of each has a Spatule-ſhaped yellow Spot, with ſeveral dark Points. Theſe Petals ſpread open flat, and in the Middle of the Flower there are Three ſmall Petals or Flower Leaves, ſtanding erect, which are cut at the Top into Two acute Segments, as is ſhewn at *d*. They encompaſs the oblong Germen *e*, upon which is a ſhort Style, crowned by Three bifid Stigmas, repreſented *f*, *f*, *f*. Theſe ſpread out from each other, and are almoſt of the ſame Colour with the Petals. After the Flower is paſt, the Germen becomes an oval Capſule g, having Three deep longitudinal Furrows, and divided into Three Cells, as is ſhewn at *h*, which open with Three Valves *i*, and are filled with roundiſh Seeds *k* and *l*. The Flowers appear the Beginning of *May*, and the Seeds ripen in *June*.

Fig. 2. *Morea ſpatha uniflorâ, caule planifolio, floribus majoribus.* Morea with One Flower in each Sheath, a Stalk with a plain Leaf, and larger Flowers.

The Root of this is like that of the former; as are alſo the Stalks and Leaves; but the Stalk is green to the Bottom. The Flowers come out ſingle from each Sheath, and are larger than thoſe of the other Sort. They are of a worn-out Purple Colour, and each Petal has a large yellow Spot near the Tail. In theſe Particulars their Difference chiefly conſiſts. It flowers about the ſame Time with the former.

Both theſe Plants grow naturally at the *Cape of Good Hope*, from whence their Seeds were brought, which ſucceeded in the *Chelſea* Garden, where the Plants have lately flowered.

PLATE CCXXXIX.

Fig. 1. MOREA *ſpatha uniflorâ, foliis gladiolatis, radice fibroſa.* Morea with One Flower in each Sheath, Sword-ſhaped Leaves, and a fibrous Root.

THIS Plant alſo grows naturally at the *Cape of Good Hope*. The Seeds of it were brought from thence by the Title of *White Water Lilly*. Theſe ſucceeded in the *Chelſea* Garden, where the Plant has flowered.

The Root of this is compoſed of many thick Fibres, which run downward; from which ariſe Sword-ſhaped Leaves, which embrace each other at their Baſe, but ſpread out above. They are diſpoſed, like thoſe of the common *Flag Iris*, into flat Heads or Offſets, and are of a deep Green, about Six or Seven Inches long, and Half an Inch broad at Bottom, terminating in acute Points, as is ſhewn at *h*. The Stalk riſes about a Foot high, and garniſhed at each Joint with One ſmall acute-pointed Leaf, which embraces the Stalk with its Baſe, and grows erect, as is repreſented at *i*. The Stalk is terminated by a ſingle Flower, coming out of a ſmooth ſharp pointed Sheath *a*. It is compoſed of Six oval Spear-ſhaped Petals or Segments, which are equal in Size, and ſpread open flat. They are of a dirty White, with a Shade of Sky-blue, and have a Sulphur-coloured Spot near their Tail, repreſented at *b*, *c*, and *d*. In the Center of theſe ariſe Three forked Petals, which ſtand erect, as *e*, *f*, *g*, of a bluiſh Purple Colour. Theſe encompaſs the Stamina and Style, which are faſtened to their Tails, as is ſhewn at *e*; Two of which are repreſented ſpread out at *f*, to ſhew them diſtinctly. There are Three of theſe Stamina, which are ſhort, ſlender, and are terminated by oblong Summits. The Germen, which is ſituated below the Flower, ſupports a very ſhort Style, which is crowned by a trifid erect Stigma. After the Flower

fades,

fade, the Germen becomes an oblong Three cornered Capſule, having Three Cells, which are filled with roundiſh Seeds. It flowers in *June*, and the Seeds ripen in *July*.

Fig 2. Ixia *planifolia, caule multifloro, ſpatha breviſſima.* Ixia with a plain Leaf, a Stalk with many Flowers, and the ſhorteſt Sheath to the Flower.

This Plant was raiſed in the *Chelſea* Garden from Seeds which were brought from the *Cape of Good Hope.* It hath a ſmall compreſſed bulbous Root, having a ſmooth dark-coloured Coat, from which ariſe ſeveral plain ſmooth Leaves of different Lengths; ſome are Four or Five Inches long, others Seven or Eight; their broadeſt Part is near Half an Inch, but they are narrow at both Ends, and terminate in Points. The Stalk riſes between the Leaves to about five Inches high. It is crooked at the Joint, where there is a ſmall Leaf, whoſe Baſe embraces it. The Flowers are produced at the Top of the Stalk. They have each a very ſhort withered Spatha or Sheath, which divides into Two Parts, as is repreſented at *a*. The Tube of the Flower is ſhort and ſwelling; the Petals are broad and obtuſe, as is ſhewn at *b*; theſe ſpread open, and are equal in Size and Poſition. They are of a brigh Orange or Gold Colour, and are connected at their Baſe. When the Sun ſhines on the Flowers, they reflect ſtrongly the Rays, ſo that the Sight is thereby dazled. In the Centre of the Flower is ſituated the Stamina and Style, as is repreſented at *c*. There are Three ſlender Stamina in each, as is ſhewn at *f*, which are terminated by oblong cylindrical Summits *g*, which ſtand erect, and their Baſe ſits upon the Top of the Stamina. The Style is longer than theſe, and is crowned with a trifid Stigma, which ſpreads open Three Ways. The Germen, which is ſituated under the Flower, is afterwards changed to an oval Capſule with Three Cells, filled with roundiſh Seeds. It flowers in *June*, and the Seeds ripen in *July*.

PLATE CCXL.

Bulbocodium, *Tourn. Cor. Inſt.* 50. *Crocus, Lin. Gen.* 53.

The Characters of this Genus are,

The Flower has a ſmall One-leaved Empalement, which ſoon falls off. The Flower is of One Petal, cut into Six Segments almoſt to the Bottom; theſe are acute-pointed b, *equal in Size, and ſpread open like a Star. It has Three ſhort Stamina* c *and* d, *which are terminated by oblong erect Summits, and a roundiſh Germen* a, *ſituated under the Flower, ſupporting a ſlender Style, which is longer than the Stamina, crowned by Three bifid reflexed Stigmas* e. *The Germen afterwards becomes an oval Capſule with Three Cells, filled with roundiſh Seeds.*

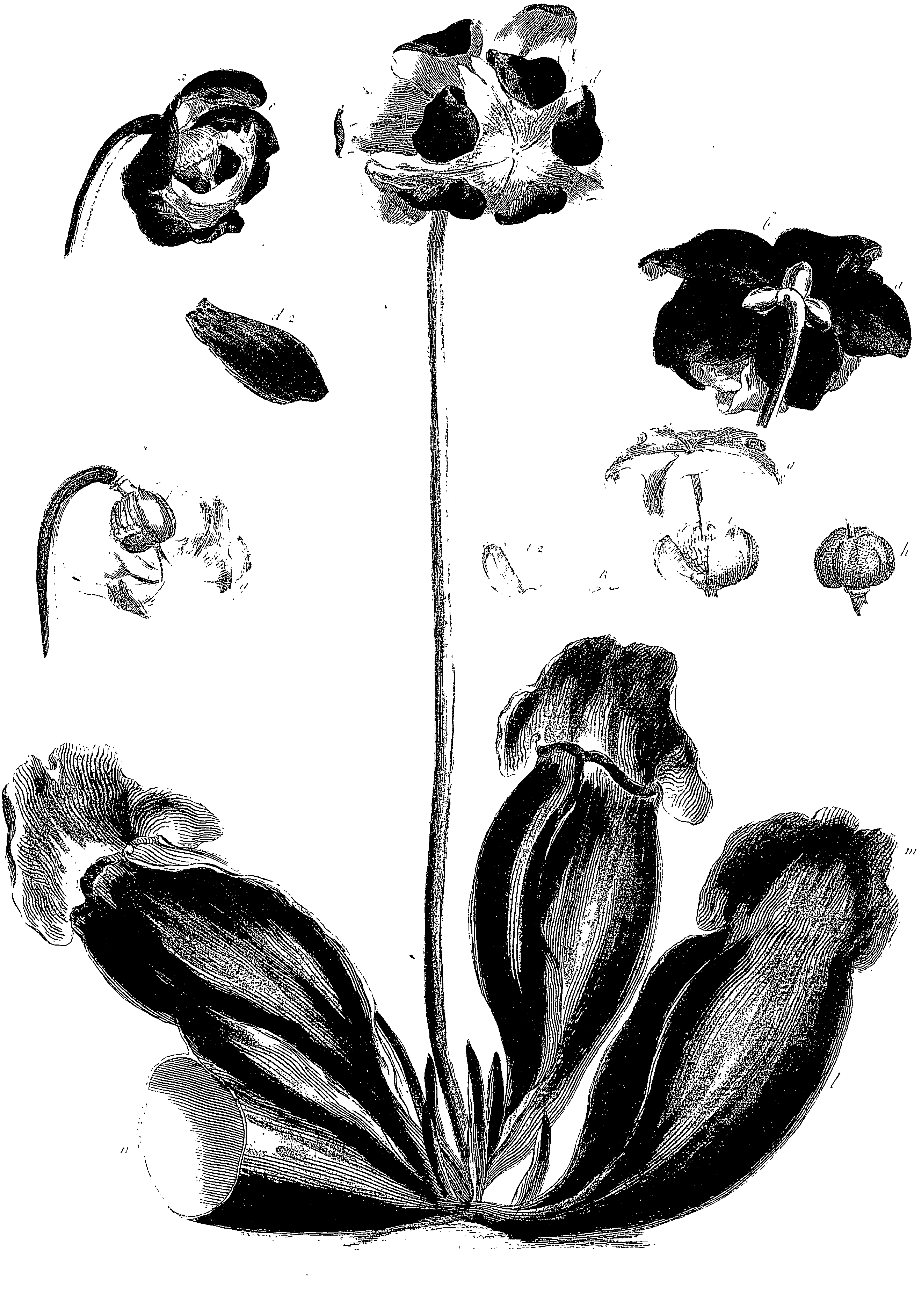
THIS Genus of Plants belongs to the Second Section of *Tournefort*'s Ninth Claſs, which includes the Herbs with a Lilly Flower of One Petal, cut into Six Parts, whoſe Empalement becomes the Fruit.

Doctor *Linnæus* has joined this Genus to the *Crocus*, which is placed in the Firſt Section of this Third Claſs, which contains thoſe Plants whoſe Flowers have Three Stamina and One Style: But the Flowers of his Genus ſitting upon the Germen, and the Petal being divided to the Bottom, having no Tube, are ſufficient Characters to ſeparate this Genus from the *Crocus.*

The Species here repreſented is,

Bulbocodium *pedunculis nudis unifloris, foliis ſubulatis linearibus longiſſimis.* Bulbocodium with naked Footſtalks, having One Flower, and linear Awl-ſhaped Leaves, which are very long.

The Seeds of this Plant were brought from the *Cape of Good Hope*, where it grows naturally. Theſe have ſucceeded in the *Chelſea* Garden, and the Plant has there produced Flowers. The Root is bulbous, of an oval Figure, and covered with a ſmooth Skin, as is repreſented at *h*. The Leaves are very long and narrow; they are Three-cornered, but their upper Surface is flat, and the under has an acute Angle running longitudinally through the Middle. They ſtand erect, and between them come out the Footſtalks of the Flowers, which are about Two or Three Inches long. They are taper, erect, and naked, terminated by One Flower ſitting upon the Germen *a*, which is oval and ſmooth. The Flowers are of One Petal, according to Mr. *Ray* and *Tournefort*, becauſe they are joined together at the Bottom; but they are cut into Six Segments almoſt to the Bottom, which end in ſharp Points, as is ſhewn at *b*. Theſe ſpread open in the Day, but ſhut up every Afternoon, when the Sun leaves them. They are of a light Purple Colour, with a blue Circle within on the Top of their Tails, which are of a pale Yellow within, repreſented at *g*. In the Centre of the Flower are ſituated the Style and Stamina. There are Three of theſe Stamina, which are repreſented at *d, d, d*. They are ſhort, and are terminated by oblong erect Summits of a yellow Colour. Theſe are magnified, but at *c* is One of the natural Size. The Style, which is longer than the Stamina, is crowned by Three bifid Stigmas, which are reflexed; One of which is repreſented, of the natural Size, at *e*; and at *f, f*, they are magnified. After the Flowers fade, the Germen becomes an oval Capſule, with Three Cells filled with roundiſh Seeds. The Flowers appear in *May*, and, before they decay, they turn of a faded blue Colour.



SARRACENIA, [illegible] Hort. Cliff. 437.

[illegible] P. Miller July 26. 1758.

PLATE CCXLI.

Sarracena, *Tourn. Inſt. R. H.* 657. *Tab.* 476. *Lin. Gen. Plant.* 578. Sideſaddle-flower.

The Characters of this Genus are,

The Flower has a double Empalement: The under one a, *is compoſed of Three ſmall Leaves, which fall off; the upper* b, *is compoſed of Five large coloured Leaves, which are almoſt oval, and drop off. It has Five oval inflexed Petals* c, *which cover the Stamina, whoſe Tails are oblong-oval, and a great Number of ſmall Stamina* e, *terminated by ſingle Summits, with a roundiſh Germen* f, *ſupporting a ſhort cylindrical Style, crowned by a Target-ſhaped five cornered Stigma* d *and* g, *which covers the Stamina, and is permanent: The Germen afterward turns to a roundiſh Capſule, divided into Five Lobes* h, *having Five Cells, filled with ſmall roundiſh Seeds* i, *which end in acute Points.*

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Thirteenth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina, and One Style. The title of this Genus was given to it by Dr. *Tournefort*, in Honour of Dr. *Sarrazin*, a curious Botaniſt, who ſent this, and many other curious Plants, from *Canada* to the Royal Garden at *Paris*.

The Species here repreſented is,

Sarracena *foliis gibbis, Hort. Cliff.* 472. Sarracena with gibbous Leaves. This is the *Sarracena Canadenſis, foliis cavis & auritis, Tourn. Inſt. R. H.* 657. *Canada* Sarracena with hollow and eared Leaves. *Caſpar Baubin* titles it *Limonium peregrinum, foliis formâ floris Ariſtolochiæ, Pin.* 192. *i. e.* Foreign Sea-Lavender with Leaves ſhaped like the Flowers of Birthwort. And *Cluſius*, in his Hiſtory of Plants, calls it *Limonio congener*; i. e. A Plant near of Kin to Sea-Lavender. *Morriſon* titles it *Coilophyllum Virginianum breviore folio, flore purpuraſcente, Hiſt.* 3. *p* 533. *Virginia* Hollow-leaf with a ſhorter Leaf and purpliſh Flower. Mr. *Cateſby*, in his Hiſtory of *Carolina*, calls it *Sarracena foliis brevioribus latioribus, Vol.* 2. *p.* 70. Sarracena with ſhorter and broader Leaves.

This Plant grows naturally on moiſt Bogs in moſt Parts of *North America*. The Structure of every Part of this Plant is very ſingular. The Root is compoſed of ſtrong Fibres, which ſtrike deep into the ſoft ſpongy Earth where they naturally grow; from which come out Five, Six, or Seven Leaves, in proportion to the Strength of the Plants. Theſe are about Five Inches long, and are hollowed like a Pitcher, as is repreſented at *l* and *n*: They are narowed at their Baſe, but are ſwelled out and bellied above, rounded on their outer Side, but are a little compreſſed on their inner Side, having a broad leafy Border running longitudinally the whole Length of the tubulous Part. At the Top, or Neck, of the gibbous Part of the Leaf is fixed an Appendage or Ear, repreſented at *m*, which is bluntly indented, and ſtands erect. The hollow Parts of theſe Leaves have always Water ſtanding in them; and this Top or Ear is ſuppoſed in hot dry Weather to ſhrink, and fall over the Mouth of the Tube, and ſerve as a Lid to prevent the Exhalation of the Water: So that, in the greateſt Droughts, Birds and other Animals repair to theſe Plants, where they always find Water to refreſh them. The Leaves, in Spring, are of a dark green Colour, but gradually change to a purpliſh Colour; and toward Autumn are of a dark brown. From the Center of the Leaves comes out a naked Footſtalk, which riſes a Foot high, ſuſtaining at the Top One large Flower, which nods on one Side, by the Footſtalk being recurved. The Outſide of the Flower is of a dark purple Colour, and the Inſide green. The Petals turn inward, and cover a great Number of ſmall Stamina, which ſurround the Style, and are terminated with Summits of a pale Sulphur-colour. The Style ſupports a broad Buckler-ſhaped Stigma, which ſpreads over, and cloſely covers the Stamina; whereby they are ſecured from the Injuries of the Weather: For the inflexed Petals meet, and cover the Borders of the Stigma ſo cloſely, as that the Stamina do not appear, unleſs the Flower is nearly viewed on the Side, where there are Preforations to admit the Air; which is abſolutely neceſſary for the ripening of the *Farina fæcundans*, and alſo to aſſiſt the Conveyance of it, when fitted to the proper Matrix.

The *Engliſh*, who firſt ſettled in *North America*, gave to this Plant the Title of *Sideſaddle-flower*, from the Reſemblance of the Stigma to a Woman's Pillion; and ſome of the firſt Writers, who deſcribed the Country, have given imperfect Accounts of this Plant. They have taken particular Notice of the Leaves always having Water in them; and one of them mentions his being often refreſhed with this Water in great Droughts, when he was at a Diſtance from any other Supply.

PLATE CCXLII.

Cypripedium, *Lin. Gen. Plant* 906. *Calceolus, Tourn. Inſt. R. H.* 436. *Tab.* 249. *Calceolus Mariæ, Raii Meth. Plant.* 121. Ladies Slipper. In *French, Sabot.*

The Characters of this Genus are,

It has a ſingle Stalk, with a Sheath a, *at a Diſtance from the Flower. The Germen ſuſtains the Flower, which has no Empalement. It has Four Petals repreſented at* b, *which are long, narrow, and ſpread open. Within the Petals is ſituated a large, ſwoln, ſlipper-ſhaped Nectarium* c, *which is obtuſe and hollow, with a ſmall oval plain inflexed Lip. The Flower has Two ſhort Stamina ſitting upon the Pointal, terminated by erect Summits hid under the upper Lip of the Nectarium. It has a long ſlender contorted Germen, ſhewn at* d *and* e, *ſupporting Two ſhort Styles faſtened to the upper Lip of the Nectarium, crowned by an obſolete Stigma: The Germen afterward becomes an oblong-oval Capſule* f, *having Three obtuſe Corners, as is ſhewn at* g, *with Three Seams, opening under each Angle, with Three Valves in One Cell* h, i, *including a great Number of ſmall Seeds* k, *which adhere to the longitudinal Pericarpium.*

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Twenty-firſt Claſs, which includes thoſe Plants whoſe Flowers have their Stamina and Style connected together, and the Flowers have Two Stamina. *Tournefort* places it in the Third Section of his Eleventh Claſs, which contains the Herbs with an anomalous Flower of many Petals, whoſe Empalement becomes the Fruit.

The Species here repreſented is,

Cypripedium *radicibus fibroſis, foliis ovato-lanceolatis caulinis, Act. Upſal.* 1740. Ladies Slipper with fibrous Roots, and oval Spear-ſhaped Leaves on the Stalk. This is the *Calceolus Marianus, Dod. Pempt.* 180. Our Lady's Slipper. *Caſper Baubin* titles it *Helleborine flore rotundo, ſeu Calceolus, Pin.* 187. Baſtard Hellebore with a round Flower or Slipper. *Gerard* calls it *Calceolus Mariæ, p.* 359. Ladies Slipper. And *Parkinſon*, in his *Theatre of Plants, p.* 217. *Elleborine major, ſeu Calceolus Mariæ.* Greater Baſtard Hellebore, or Ladies Slipper.

As the Structure of this Plant is of a ſingular Form, ſo we have choſen to place it near the former, altho' it is not in the Order we propoſed to obſerve: But as both theſe Plants produced their curious Flowers in the *Chelſea* Garden in great Perfection, ſo we were deſired, by ſeveral of our Purchaſers, to give their Figures; which were drawn as near to Nature as poſſible.

The Plant here repreſented grows naturally in ſome Parts of *England*; particularly in *Heikſwood*, by *Ingleborough*, in *Yorkſhire*; and in the Park of the late *Robert Fenwick*, Eſq; at *Borough-hall*, near *Kirkby-Lonſdale*, in *Lancaſhire*. The Root of this Plant is compoſed of fleſhy black Fibres, which ſpread obliquely near the Surface of the Ground, ſending out ſmall Fibres every Spring. The fleſhy Part of the Root retains the Mark of the Stalk of the former Year; and there is annually a new Root formed on the Side of the old one, on the oppoſite Side of the Stalk, as in other Bulbs. The Stalk riſes a Foot high, is a little hairy, and garniſhed with oval Spear-ſhaped Leaves, whoſe Baſe embraces the Stalks: They are from Three to near Four Inches long, and near Two Inches broad at their Baſe, having ſeveral longitudinal Veins, like thoſe of Baſtard Hellebore: They are of a deep Green, and end in acute Points. There are Four or Five of theſe Leaves placed alternately along the Stalk, which is terminated by a ſingle Flower, whoſe Bud is covered with a Sheath; but before the Flower opens, the Footſtalk advances above the Sheath. The Flower is naked, having no Empalement: It has Four narrow acute-pointed Petals, of a dark purple Colour, which ſpread open; within which is ſituated a large hollow Nectarium, ſhaped ſomewhat like an old-faſhioned Slipper, of a yellow Colour, having a ſmall Lip or Cover at the Tail; under which are ſituated the Stamina and Style. This Plant flowers in *May*, and the Seeds ripen the Beginning of *Auguſt*. The Stalk decays to the Root in Autumn, and a new one riſes the following Spring.

PLATE CCXLIII.

Saxifraga, *Tourn. Inſt. R. H.* 252. *Tab.* 129. *Raii Meth. Plant.* 111. *Lin. Gen. Plant.* 494. Saxifrage.

The Characters of this Genus are,

The Flower has a ſhort acute-pointed permanent Empalement, of One Leaf, cut into Five Parts: It has Five plain Petals, which are longer than the Empalement; and Ten Awl-ſhaped Stamina, terminated by roundiſh Summits. It has a roundiſh acute-pointed Germen, ſitting upon Two Styles crowned by obtuſe Stigmas. The Germen afterward becomes an oval Capſule, with Two Horns opening between their Tops, filled with ſmall Seeds.

This Genus of Plants is ranged in the Third Section of *Tournefort*'s Sixth Claſs, which includes the *Herbs with a Roſe Flower, whoſe Pointal becomes the Fruit for the moſt part with two Capſules.* Mr. *Ray* puts it in the Second Section of his Twenty-ſecond Claſs, which contains the *Herbs with a Flower of Five Petals, diſpoſed either alternate, or without Order, along the Stalks, and the Seeds are in Capſules.* Dr. *Linnæus* ranges it in the Second Section of his Tenth Claſs, which includes thoſe *Plants whoſe Flowers have Ten Stamina and Two Styles.*

The Species here repreſented is,

Saxifraga *foliis radicatis aggregatis lingulatis cartilagineo-ſerratis, caule pyramidato.* Saxifrage with Tongue-ſhaped Leaves gathered together at the Root, which have cartilaginous Saws on their Edges, and a pyramidal Stalk. This is the *Saxifraga montana, pyramidata, folio longiore, Tourn. Inſt.* 253. Mountain pyramidal Saxifrage with a longer Leaf. *Boerhaave* places it in his Genus of *Sedum*; and titles it, *Sedum pyramidale elegantiſſimum, H. L.* 1. *p.* 287. The moſt elegant pyramidal Houſeleek.

This Plant grows naturally upon the Mountains in *Italy*. The lower Leaves are gathered into a circular or Roſe Form, lying over each other in Three or Four Series: They are flat, ſhaped like a Tongue, and ſit cloſe to the Root: They are about Two Inches long, and half an Inch broad, of a whitiſh-green Colour, and have rough ſawed Edges. The Stalk riſes a Foot and a Half high, branching out near the Bottom: The lower Branches are pretty long, and grow horizontally: Above theſe, the Branches are ſhorter to the Top, forming a large pyramidal Spike of Flowers. The Branches come out alternately from the Stalk, and divide into ſeveral ſmaller: Theſe are garniſhed with white Flowers having an acute Empalement of One Leaf, cut at the Brim into Five Segments, as is ſhewn at *a*. They have Five obtuſe Petals, repreſented at *b*, and Ten Stamina, which are about half the Length of the Petals, ſhewn at *c*; which are terminated by roundiſh red Summets *d*. In the Center of the Petals is ſituated a roundiſh acute-pointed Germen *d*, ſitting upon Two Styles crowned by obtuſe Stigmas *f*. The Germen, after the Flower is paſt, turns to a Capſule with Two Horns *g*, opening at the Top, as is ſhewn at *h*, and filled with ſmall Seeds *i*.

This Plant flowers the latter End of *May* or the Beginning of *June*; and, during its Continuance in Flower, is a very ornamental Plant to place in Halls or Chimnies.

PLATE CCXLIV.

ROBINIA, *Lin. Gen. Plant.* 775. *Pſeudoacacia, Tourn. Inſt. R. H.* 649. *Acacia Americana, Raii Meth. Plant.* 164. Falſe Acacia.

The Characters of this Genus are,

The Empalement of the Flower is of One Leaf, cut into Five Segments at the Brim, as ſhewn at a. *The Flower is of the Butterfly Kind: The Standard* b, *is large, roundiſh, and open, ſtanding erect: The Keel* c, *is roundiſh, compreſſed, obtuſe, and is as long as the Wings* d, d, *which are oval, and have Appendages which are obtuſe. It has Ten Stamina, repreſented at* e, *Nine of which are joined together, and the Tenth* f, *is ſeparated: Theſe are terminated by roundiſh Summits* g. *The Germen is oblong and cylindrical, which ſupports a ſlender Style* h, *crowned by a ſimple Stigma* i. *The Germen afterward turns to an oblong compreſſed Pod* k, *which opens with Two Valves* l, *incloſing One Row of compreſſed Kidney-ſhaped Seeds* m.

THIS Genus of Plants is ranged in the Third Section of *Linnæus*'s Seventeenth Claſs, which includes thoſe *Plants whoſe Flowers have Ten Stamina in Two Bodies. Tournefort* places it in the Third Section of his Twenty-ſecond Claſs, which contains the *Trees and Shrubs with a Butterfly Flower, whoſe Leaves are for the moſt part placed by Pairs along the Midrib.* Mr. *Ray* places it among the Trees bearing Pods, of the Butterfly Kind, whoſe Leaves are winged, and the Branches are armed with Spines.

The Species here repreſented is,

ROBINIA *foliis impari-pinnatis, foliolis ovatis, ramis pedunculiſque hiſpidis, Dict. Hort.* Robinia with unequal winged Leaves, having oval Lobes, and the Branches and Footſtalks armed with briſtly Hairs. This is the *Pſeudoacacia hiſpida, floribus roſeis, Cateſb. Carol.* 3. *p.* 20. Prickly Baſtard Acacia with Roſe-coloured Flowers.

This Plant has been of late Years introduced into the *Engliſh* Gardens from *Carolina*, where it naturally grows. In its native Soil it riſes with a woody Stalk to the Height of Twenty Feet: But in *England* it appears not to grow ſo large, for the Plants produce their Flowers very near the Ground; and ſo far as a Judgment can be yet formed by their manner of growing, it has more the Appearance of a Shrub than a Tree, and as ſuch will be more ornamental: For ſhould this riſe as high as the common white *Falſe Acacia*, the Flowers would be ſo far diſtant from the Sight, as that their great Beauty would not be ſo conſpicuous.

The Stalk of this Plant is woody and ſmooth; but the young Branches are cloſely armed with ſtiff brown briſtly Hairs, as are alſo the Footſtalks of the Flowers, and their Empalements: Theſe Spines are very like thoſe on the young Shoots of Raſpberries; which has given Occaſion to the Inhabitants of *Cornwall* and *Devonſhire*, where the Plants are in greater Plenty than about *London*, to give it the Title of *Raſpberry Plant*. The Leaves of this Sort reſemble thoſe of the common *Falſe Acacia*; but the Lobes are larger, and nearer to an oval Form: They are ſmooth, and of a light green Colour, and are compoſed of Six or Seven Pair of oval Lobes terminated by an odd one. The Flowers are produced in long Bunches from the Side of the Branches, like thoſe of the common Sort; but the Bunches are longer, and the Flowers much larger: They are of a bright Purple or Roſe Colour; in which Particular they greatly excel thoſe of the common Sort; but they have no Scent, ſo that the common Sort is preferable to it on that Account. The Flowers ſtand each upon a ſhort Footſtalk, and make a fine Appearance during their Continuance. This flowers early in *June*, and is ſucceeded by flat oblong Pods of Seeds, which in the natural Places of its Growth, ripen in *September*. But in *England* they have not, as yet, produced any Pods.

As this Plant is not very common at preſent in the Gardens about *London*, and having produced its beautiful Flowers in the *Chelſea* Garden, we were tempted to inſert it here.

PLATE CCXLV.

OTHONNA, *Lin. Gen. Plant.* 888. *Doria, Raii Meth. Plant.* 33. *Jacobæa, Tourn. Inſt. R. H.* 485. *Tab.* 276. Foreign Ragwort.

WE have in a former Number exhibited Two Species of this Genus, where we have given the Characters of the Genera: But as the Two Plants, here exhibited, have been by ſome Botaniſts ſuppoſed to be the ſame Species, ſo we have been prevailed on to give their Figures and Deſcriptions from Nature, as we had an Opportunity of doing it from the Plants which flowered the laſt Spring in the *Chelſea* Garden, when we had an Opportunity to examine their Characters more nicely than before.

The Species here repreſented are,

Fig. 1. OTHONNA *foliis cuneiformibus integerrimis ſeſſilibus, caule fruitcoſo procumbente, pedunculis longiſſimis, Dict. Hort.* Othonna with entire Wedge-ſhaped Leaves ſitting cloſe to the Stalks, a ſhrubby trailing Stalk, and very long Footſtalks. This is the *Calthoides Africana, glaſti folio, Juſſ. African* Baſtard Marigold with a Woad Leaf.

The Seeds of this Sort were brought to *England* by the late Dr. *Shaw*, who diſcovered the Plants growing naturally in *Algiers*. This has a ſtrong fibrous Root, which ſhoots deep in the Ground, and ſends out many ſhrubby Stalks, which ſpread on every Side, and trail upon the Ground: Theſe are garniſhed with Wedge-ſhaped Leaves of a grey Colour, and a pretty thick Conſiſtence, which are entire, and ſit cloſe to the Stalks, ſtanding without Order on the Branches. The Flowers ſtand upon long ſucculent Footſtalks, which come out from the Wings, and at the Top of the Stalks: They have a ſingle Empalement of One Leaf cut into Eight equal Segments at the Top, as is repreſented at *a*. The

Flowers are yellow, and are compoſed of many hermaphrodite Florets, which form the Diſk: Theſe are tubulous, and indented in Five Parts at the Brim, as is ſhewn at *b*: They have in each Four or Five Stamina, which are the Length of the Tube, repreſented at *d*, which ſit upon the Germen *c*, and have a Style longer than the Stamina, to which it is connected, as is ſhewn at *e*. The Female Half Florets compoſe the Border or Rays: Theſe are Tongue-ſhaped, and indented at the Point in Three Parts, as is ſhewn at *h*: Theſe have an oblong Germen *g*, with a ſlender Style crowned by a bifid reflexed Stigma. The Germen afterward turns to a ſingle oblong Seed *f*, naked at Bottom, but crowned with a pappoſe Down. This Sort flowers in *May*, when the Plants make a fine Appearance; but the Seeds ſeldom ripen in *England*. The hermaphrodite Florets are rarely ſucceeded by Seeds.

Fig. 2. OTHONNA *foliis lanceolatis integerrimis, Hort. Cliff.* 419. Othonna with Spear-ſhaped entire Leaves. This is the *Jacobæa Africana, fruteſcens, craſſis, & ſucculentis foliis, Hort. Amſt.* 2. *p.* 147. Shrubby *African* Ragwort with thick ſucculent Leaves.

This Sort grows naturally at the *Cape of Good Hope*. It has round Stalks, which at firſt are herbaceous and ſucculent, but by Age become ligneous. They riſe Three or Four Feet high, and divide into many Branches from the Bottom, which are garniſhed with thick ſucculent Leaves, which are Spear-ſhaped, about Two Inches long, and One broad in the Middle, of a grey Colour, and their Edges entire: They are placed without Order, and ſit cloſe to the Branches. The Flowers are produced toward the End of the Branches, upon ſucculent Footſtalks about Four Inches long, each ſuſtaining One yellow Flower, ſhaped like thoſe of the former Sort, but ſmaller.

This Plant begins to ſhew its Flowers in *Auguſt*; and there is a Succeſſion of Flowers on the ſame Plant till the Middle of Winter, during which Time it makes a good Appearance in the Green-houſe.

PLATE CCXLVI.

SCHINUS, *Lin. Gen. Plant.* 479. *Molle, Tourn. Inſt. R. H.* 661. *Indian* Maſtick Tree.

The Characters of this Genus are,

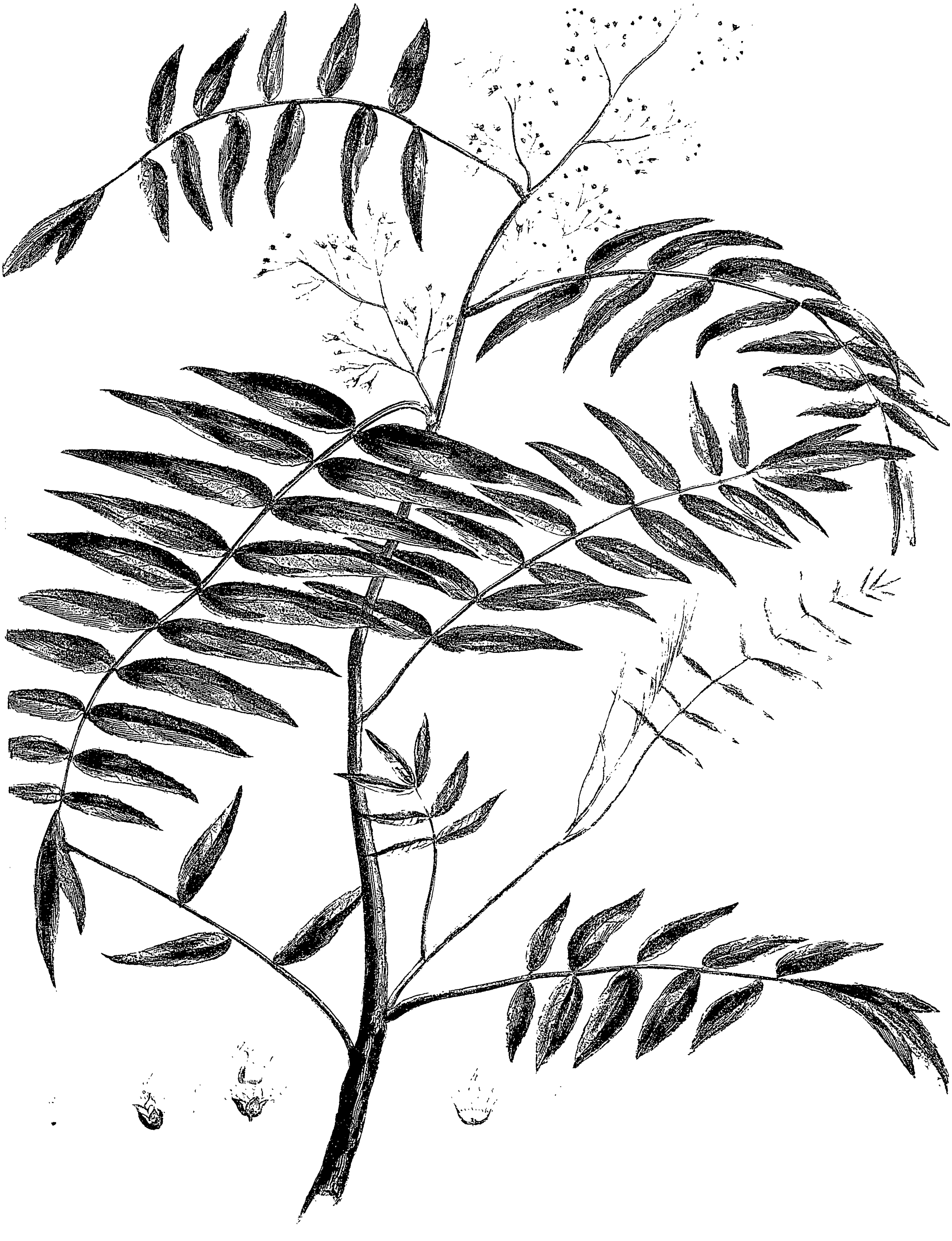
The Flower has a ſmall Empalement indented in Five Parts, repreſented at a: *It has Five Petals, which ſpread open, as they are ſhewn magnified at* b *and* c, *and Ten Stamina, repreſented at* d *and* e, *terminated by thick Summits. In the Center is ſituated a roundiſh Germen* f, *ſupporting a ſhort thick Style* g, *crowned by a bifid reflexed Stigma. The Germen afterward turns to a roundiſh Berry with One Cell, containing One Seed of the ſame Form.*

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Tenth Claſs, which includes thoſe *Plants whoſe Flowers have Ten Stamina and One Style. Tournefort* has placed it in the Appendix to his *Inſtitutions of Botany*; but it properly belongs to his Twenty-firſt Claſs, which includes the *Trees and Shrubs with a Roſe Flower, whoſe Pointal Turns to a Fruit with One Cell.*

The Species here repreſented is,

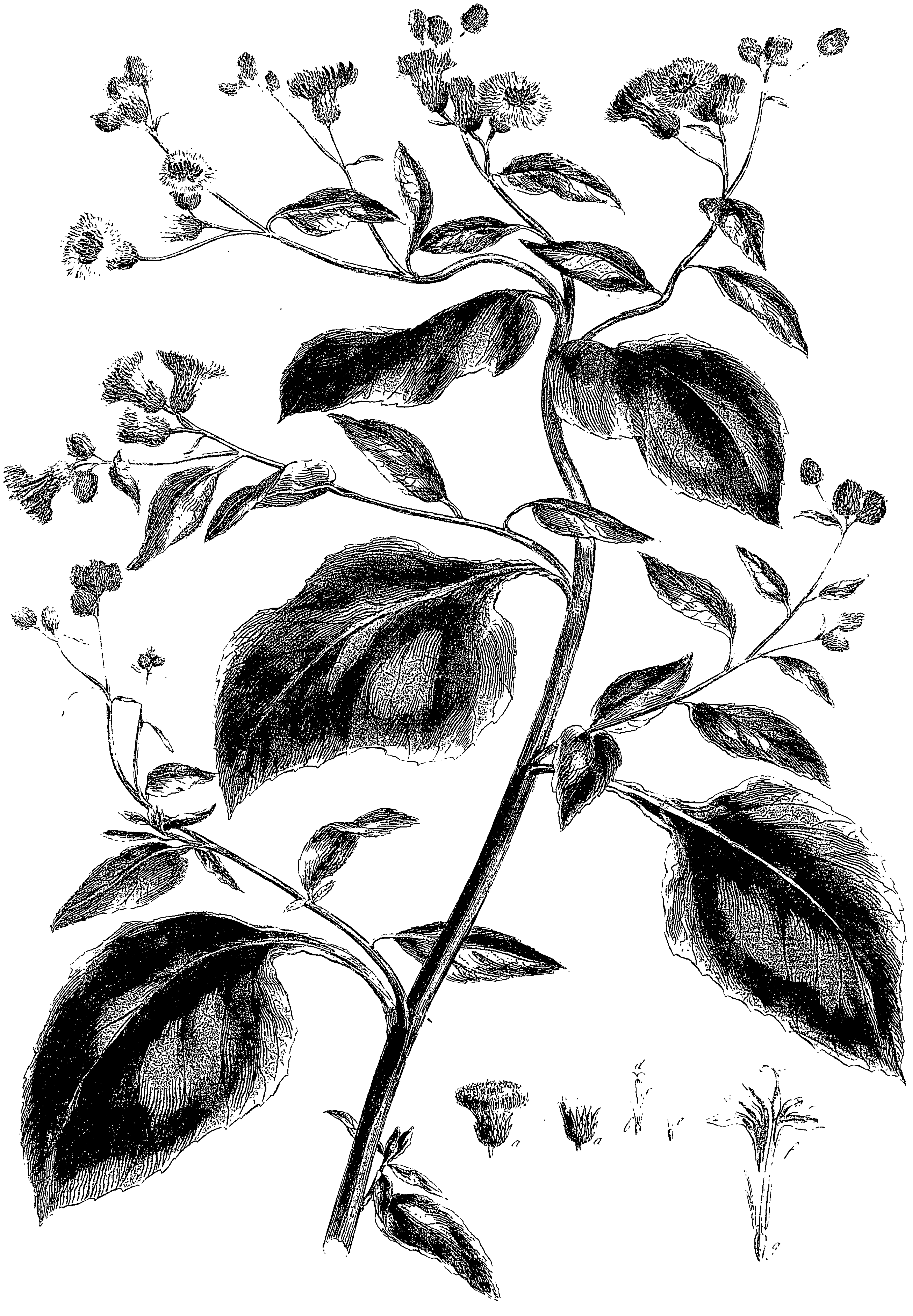
SCHINUS *foliis pinnatis, foliolis ſerratis, impari longiſſimo, petiolo æquali, Lin. Sp. Plant.* 388. Schinis with winged Leaves whoſe Lobes are ſawed, the terminating Lobe being longer than the other, and the Footſtalks equal. This is the *Lentiſcus Peruviana, C. B. P.* 399. *Peruvian* Maſtick Tree; the *Molle, Cluſ. Monard.* 322; and the *Arbor Molle*, or *Indian* Maſtick Tree.

This Tree grows naturally in *Mexico*, *Peru*, and alſo in *Braſil*, where it riſes to the Height of Twenty-five or Thirty Feet; but in *England* it ſeldom riſes half ſo high. The Stalk is woody, and, while the Trees are young, has a ſmooth brown Bark; but as they grow old the Bark becomes rugged, and is cleft aſunder, like that of many other Trees. From the Cracks of the Bark, in very hot Weather, there ſweats out a ſtrong Balſam or Turpentine, which, in the Countries where the Trees grow naturally, is collected, and uſed for the ſame Purpoſes as Maſtick: And there the Inhabitants wound the Bark of the Trees, to cauſe it to flow more plentifully, as the *Greeks* do the Maſtick Trees in the *Levant*. The young Branches of the Trees are covered firſt with a green Bark; but by Age this becomes of a brown or purpliſh Colour. The Leaves are placed alternately on the Branches: They are compoſed of Eight or Ten Pair of Lobes or Wings, which are terminated by an odd one much longer than either of the other: They are of a lucid Green, ending in acute Points; and are ſlightly ſawed on their Edges, having very ſhort equal Footſtalks. Theſe continue green all the Year. The Flowers are produced in looſe Panicles at the End of the Branches: They are very ſmall and white, having Ten Stamina, which are terminated by golden Summits. The Figure *a* exhibits the Flower of its natural Size; the other are magnified, to ſhew their Characters more diſtinctly. That at *b* ſhews a Flower cut thro' the Middle; and *i* repreſents One of the Petals enlarged. After the Flowers are paſt, the Germen ſwells to a Berry about the Size and Shape of a Pepper-corn, whoſe Pulp, when freſh, has a ſtrong balſamic Odour.



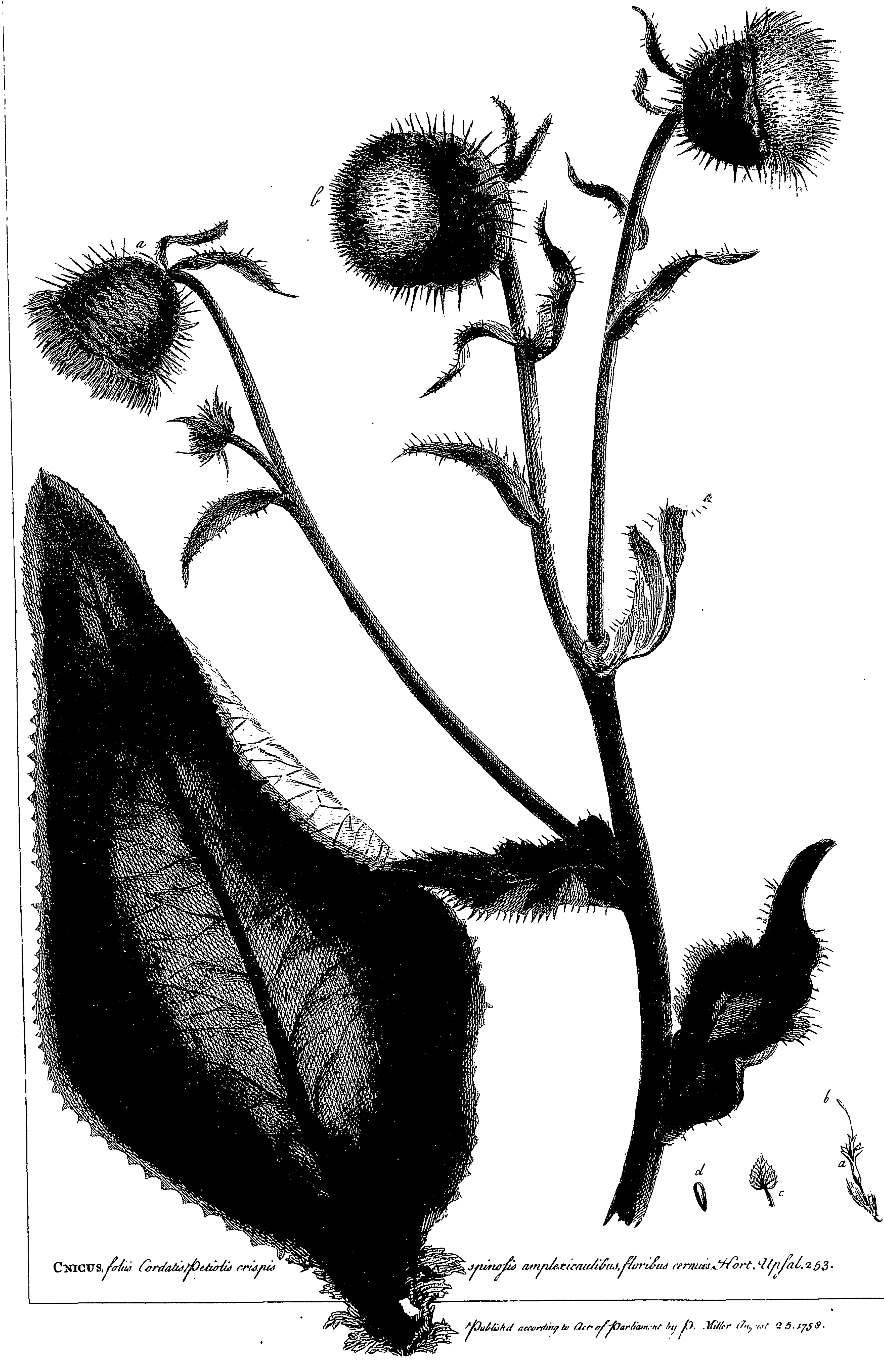
SCHINUS, *foliis pinnatis, foliolis serratis impari longissimo,* [illegible] *Lin. Sp. plant. 388.*

[illegible]



SERRATULA, [illegible]

Pl. CCXLVIII.



Cnicus, *foliis Cordatis, Petiolis crispis ſpinoſis amplexicaulibus, floribus cernuis. Hort. Upſal.* 253.

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PLATE CCXLVII.

SERRATULA, *Dillen. Nov. Gen.* 8. *Lin. Gen. Plant.* 831. *Raii Meth. Plant.* 40. *Jacea, Tourn. Inſt. R. H.* 444. Saw-wort.

The Characters of this Genus are,

It has a compound Flower, made up of many hermaprodite Florets, contained in one common cylindrical bellied Empalement a, a, *whoſe Scales are Spear-ſhaped and acute-pointed. The Florets are equal, Funnel-ſhaped, and of One Petal: The Tube is reflexed, the Brim is bellied, and cut into Five Segments: They have Five ſhort Hair-like Stamina terminated by cylindrical Summits; and an oval crowned Germen* b, *ſupporting a ſlender Style* c, *crowned by Two oblong reflexed Stigmas* d. *The Germen afterward turns to a vertical oval Seed* e, *crowned with a hairy Down, which ripens in the Empalement.*

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Nineteenth Claſs, which includes thoſe *Plants whoſe Flowers are compoſed of only fruitful Florets, and their Summits are connected with the Style.*

The Species here repreſented is,

SERRATULA *foliis oblongo-ovatis obtuſe dentatis, caule ramoſo patulo, calycibus ſubrotundis mollibus, Dict. Hort.* Saw-wort with oblong oval Leaves which are bluntly indented, a ſpreading branchy Stalk, and roundiſh ſoft Empalements.

The Seeds of this Plant were given me by *John Browning*, Eſq; of *Lincoln's-Inn*, who received them from the northern Parts of *China*, where the Plant grows naturally. It has a taper herbaceous Stalk, which riſes a Foot and Half high, covered lightly with a mealy Down, and branches out almoſt the whole Length: The Branches are ſlender, and ſpread out almoſt horizontally, turning upward toward their Ends: They are garniſhed with oblong oval Leaves, which are ſoft, and bluntly indented on their Edges. The lower Leaves on the principal Stalk are about Four Inches long, and Two Inches and a Quarter broad in the Middle, where they are broadeſt, ending in Points: They are of a hoary green Colour on their upper Side, and of a pale green on their under, having a ſtrong pale-coloured Midrib. The Leaves on the Branches diminiſh in Size upward; but are nearly of the ſame Figure with the lower. The Flowers are produced at the End of the Branches upon ſhort Footſtalks, which for the moſt Part ſuſtain Three Flowers, whoſe Empalements are ſoft, ſcaly, and ſwollen in the Middle: The Scales are ſmall, lying over each other like thoſe of Fiſh, ending in acute Points. Each of theſe Empalements contain a great Number of hermaphrodite Florets, which are Funnel-ſhaped, having a pretty long Tube, which ſpreads open at the Top, where it is cut into Five Segments, as is ſhewn at *f*; which is one of the Florets magnified, and ſplit down longitudinally, to ſhew its Structure, which in their natural Size is difficult to expreſs. Each of theſe are of One Petal, and of a purple Colour: They have Five very ſhort Stamina ſitting within the Tube; and at the Bottom is ſituated an oval Germen, repreſented magnified at *g*, which is crowned with a long hairy Down, and ſupports a Style the Length of the Tube, which is crowned by Two oblong reflexed Stigmas. After the Flower is paſt, the Germen becomes a ſingle oval Seed crowned with hairy Down, and ripens in the Empalement. The Flowers appear in *July*, and there is a continued Succeſſion of them till the Cold in the Autumn puts a Stop to them. Thoſe Flowers, which appear early in the Seaſon, are generally ſucceeded by good Seeds, if the Seaſon proves favourable; but the late Flowers are always abortive.

PLATE CCXLVIII.

CNICUS, *Tourn. Inſt. R. H.* 450. *Tab.* 257. *Raii Meth. Plant.* 41. *Lin. Gen. Plant.* 833.

The Characters of this Genus are,

It hath a compound Flower, made up of many hermaphrodite Florets, which are equal, and are included in One common imbricated Empalement a, *whoſe Scales are ſtiff, and end in acute Spines. The Florets are Funnel-ſhaped, and oblong, and the Brim is cut into Five equal Parts, as is repreſented at the Bottom* a: *They have Five ſhort hairy Stamina terminated by cylindrical Summits, and a ſhort Germen crowned with Down, repreſented under* a, *ſupporting a long Style crowned by an oblong Stigma* b. *The Germen afterward becomes a ſingle oblong Seed* d, *which is crowned by a hairy Down, and ripens in the Empalement.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Twelfth Claſs, which includes the *Herbs with a floſculous Flower, whoſe Seeds are crowned with Down.* Mr. *Ray* places it in his Ninth Claſs, which contains the *Herbs with compound Flowers collected into Heads, whoſe Florets are long, fiſtulous, and cut into Segments.* Dr. *Linnæus* ranges it in the Firſt Section of his Nineteenth Claſs, which includes thoſe *Plants whoſe Flowers are compoſed of all fruitful Florets, and their Summits are connected together.*

The Species here repreſented is,

CNICUS *foliis cordatis, petiolis criſpis ſpinoſis amplexicaulibus, floribus cernuis, Hort. Upſal.* 253. Cnicus with Heart-ſhaped Leaves having curled prickly Footſtalks which embrace the Stalks, and nodding Flowers. This is the *Carduus foliis ex cordato lanceolatis, margine ſerratis & ſpinoſis, ſquamis calycum membranaceis, laceris ſpinoſis, capitulis nutantibus, Flor. Siber.* 47. Thiſtle with Leaves from Heart to Spear-ſhaped, with ſawed prickly Borders, and membranaceous Scales to the Empalement, whoſe Cuts are prickly, and nodding Heads.

This Plant grows naturally in *Siberia*, from whence the Seeds were ſent to the Imperial Garden at *Peterſburgh*, and have ſince been communicated to the ſeveral Botanic Gardens in *Europe*. The Root of this Plant is large and rough, ſending out many thick black Fibres, which ſtrike deep in the Ground. The Leaves, which riſe immediately from the Root, are near a Foot long, and Six Inches broad in the Middle, diminiſhing gradually toward the Point; but toward their Baſe they ſwell out almoſt Heart-ſhaped: Their Footſtalks are bordered; and the Borders are cut and curled, ending with Spines, which embrace the Stalks half round: They are of a deep green on their upper Side, but white on their under, and are ſharply ſawed on their Edges. The Stalks riſe Six or Seven Feet high, ſending out on each Side a few ſmall Branches: They are ſtreaked, and of a brown Colour; and are garniſhed below with Heart-ſhaped Leaves, which embrace the Stalk half round; but thoſe Leaves toward the upper End of the Stalk are long and narrow, ending in acute Points. Each Diviſion of the Stalk is terminated by One large nodding Head of Flowers, whoſe Empalement is made up of Scales lying over each other like thoſe of Fiſh, each ending with a ſharp Spine. The Flower is compoſed of many hermaphrodite Florets, which are Funnel-ſhaped, and cut into Five Segments at the Top: They are of a pale yellow Colour, and have an agreeable Scent. The Flowers are ſucceeded by naked Seeds, which ripen in the Empalement.

This Plant flowers the Second Year from Seed, in *July*; and the Seeds ripen in the Autumn, when the Plant decays.

PLATE CCXLIX.

BUPHTHALMUM, *Lin. Gen. Plant.* 876. *Aſteriſcus, Tourn. Inſt. R. H.* 497. *Tab.* 283. *Vaill. Act. Par.* 1720. *Dillen. Hort. Elth.* 38. Ox-eye.

The Characters of this Genus are,

The Empalement of the Flower is imbricated, and varies in the different Species; in ſome the Circle of Leaves are ſoft, as at a, *in others they are ſtiff and prickly. The Flower is compoſed of hermaphrodite Florets, which form the Diſk* b, *and of Female Half florets* c, *which make the Border or Rays. The hermaphrodite Florets are Funnel-ſhaped, and cut into Five Segments at the Top, which ſpread open as at* h. *Theſe have Five very ſhort Hair-like Stamina, terminated by cylindrical Summits, and an oval compreſſed Germen* e, *ſupporting a long Style* f, *crowned by a thick ſingle Stigma. The Germen afterward becomes a ſingle oblong Seed, having ſeveral Cuts at the Top* k, *which ripens in the Empalement. The Female Half-florets, which compoſe the Border, are Tongue-ſhaped, and cut into Three Points* d: *Theſe have a Germen with Two Sides* e, *which ſupports a long Style crowned by Two oblong Stigmas but no Stamina: The Germen afterwards turns to a compreſſed ſingle Seed, whoſe Crown is bordered.*

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Nineteenth Claſs, which includes thoſe *Plants whoſe Flowers are compoſed of hermaphrodite and Female Florets, which are all fruitful, and their Summits are connected. Tournefort* places it in the Third Section of his Fourteenth Claſs, which contains the *Herbs with a radiated Flower having leafy Heads, whoſe Seeds have no Down.*

The Species here repreſented are,

Fig. 1. BUPHTHALMUM *calycibus acute folioſis, ramis alternis, foliis lanceolatis amplexicaulibus integerrimis, Hort. Cliff.* 414. Ox-eye with acute Leaves to the Empalement, the Branches alternate, and Spear-ſhaped intire Leaves embracing the Stalks. This is the *Aſteriſcus annuus, foliis ad florem rigidis, Tourn. Inſt. R. H.* 497. Annual Baſtard Starwort with ſtiff Leaves to the Flower. *Caſpar Bauhin* titles it *Aſter luteus foliolis florem rigidis, C. B. P.* 266. Yellow Starwort with ſtiff ſmall Leaves. It is alſo titled *Aſter Atticus, Maſſilioticus, Tab. Icon.* 861. Attic Starwort.

This Plant is annual, and grows naturally in the South of *France*, in *Spain*, and *Italy*. The lower Leaves are oblong, hairy, and round-pointed: They are about Four Inches long, and One broad, and are narrowed at their Baſe. The Stalk riſes Two Feet high; it is hairy and ſtiff, dividing into Two or Three Branches alternately toward the Top: Theſe are garniſhed with Spear-ſhaped Leaves, which embrace the Stalks with their Baſe. The Flowers are produced at the End of the Branches; their Empalements are compoſed of Nine ſtiff Leaves, which end with Prickles: Theſe ſpread open immediately under the Flower, like the Points of a Star. The Border or Ray of the Flower is compoſed of many female Half florets, whoſe Petals are ſtretched out on One Side in the Shape of a Tongue, and are cut into Three Segments at the Point: They are of a bright yellow Colour. The Diſk or Middle of the Flower is compoſed of a great Number of fiſtular Florets, which are hermaphrodite, having a Germen, Style, Stigma, with Stamina and Summits in each: Theſe are of a Gold Colour. Theſe Flowers appear in *July* and *Auguſt*, and the Seeds ripen in the Autumn.

The Leaves of this Plant are ſometimes uſed in Medicine; ſo the Plant is mentioned in moſt of the Diſpenſaries: But the Ancients held it in great Eſteem for Virtues which the Moderns have little Faith in.

Fig. 2. BUPHTHALMUM *calycibus obtuſe folioſis ſeſſilibus axillaribus, foliis oblongis obtuſis, Hort. Cliff.* 414. Ox-eye with obtuſe Leaves to the Empalement ſitting cloſe to the Wings of the Stalk, and oblong blunt Leaves. This is the *Aſteriſcus annuus, Luſitanicus odoratus, Boerh. Ind. Alt.* 1. *p.* 105. Sweet-ſcented *Portugal* annual Baſtard Aſter.

This is an annual Plant, which grows naturally in *Portugal*, in low moiſt Places, where there is ſtanding Water in Winter. The Branches of this Sort ſpread near the Ground: They are about a Foot long, and are garniſhed with oblong Leaves, which are of a light green Colour, and hairy: They are an Inch and Half long, and Half an Inch broad, ſitting cloſe to the Branches. The Flowers grow at the Wings of the Stalks, to which they ſit very cloſe, having no Footſtalks. The Leaves of their Empalements are oblong, blunt-pointed, and ſoft. The Flowers are compoſed of hermaphrodite Florets and female Half-florets, like thoſe of the former: They are of a bright yellow Colour, and have an agreeable ſweet Scent.

This Sort flowers in *July* and *Auguſt*, and the Seeds ripen in the Autumn.

PLATE CCL.

Delphinium, *Tourn. Inſt. R. H.* 430. *Tab.* 241. *Raii Meth. Plant.* 79. *Lin. Gen. Plant.* 602. Larkſpur *or* Larkſheel. In *French*, *Pie d'Alouette.*

The Characters of this Genus are,

The Flower has no Empalement : It has Five unequal Petals placed circularly ; the upper, which is obtuſe and indented a, *is extended behind in a long obtuſe Horn or Tube* b ; *the other are Oval-ſhaped, and nearly equal* c, *which ſpread open. It has a bifid Nectarium* a 2, *ſituated in the fore Part of the Circle of Petals, whoſe upper Part is ſtretched behind, and involves the Tube of the Petals. It has many ſmall Stamina* d, *which are broad at their Baſe, and incline to the Petals, terminated by ſmall erect Summits ; and Three or One oval Germen ſitting upon Styles the Length of the Stamina* e, *crowned by ſingle reflexed Stigmas. The Germina afterward become oval Awl-ſhaped Capſules* f, *of One Cell* g, *which open behind, and are filled with angular Seeds* h.

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Eleventh Claſs, which includes the *Herbs with an anomalous Flower of ſeveral Petals, whoſe Pointal becomes a Fruit with many Capſules.* Mr. *Ray* places it in his Eighteenth Claſs, which contains the *Plants with many Capſules, whoſe Leaves are leſs ſucculent, and their Flowers irregular.* Dr. *Linnæus* ranges it in the Third Section of his Thirteenth Claſs, which includes thoſe *Platns whoſe Flowers have many Stamina and Three Styles.*

The Species here repreſented are,

Fig. 1. Delphinium *nectariis diphyllis, labellis integris, floribus ſubſolitariis, foliis compoſitis lineari-multipartitis, Hort. Upſal.* 150. Larkſpur with a two-leaved Nectarium whoſe Lips are intire, the Flowers placed ſingly, and compound linear Leaves having many Points. This is the *Delphinium elatius ſubincanum perenne, floribus amplis azureis, Amman. Ruth.* 132. Taller perennial Larkſpur with Leaves a little hoary, and large blue Flowers.

This Plant grows naturally in *Siberia.* The Root is fibrous and perennial. The Stalk riſes near Two Feet high : It is garniſhed with Leaves compoſed of many linear Lobes or Segments, which end in many Points ; they are of a light Green on their upper Side, a little hoary on their under, and ſpread open like thoſe of Wolfsbane. The Stalk divides into Two or Three Branches upward, and at each Joint is garniſhed with One ſmall Leaf, cut into narrow Segments like thoſe below ; and the upper Part of the Branches are garniſhed with large Flowers of a fine azure blue Colour, which come out ſingly from the Sides of the Branches upon pretty long Footſtalks : Theſe appear in *June* and *July*, and the Seeds ripen in *Auguſt.*

Fig. 2. Delphinium *nectariis diphyllis, labellis bifidis, apice barbatis, foliis trilobis inciſis, caule erecto.* Larkſpur with a two-leaved Nectarium having a bearded Point, Leaves with Three Lobes which are cut into Segments, and an upright Stalk.

This Plant grows naturally in moſt Parts of *North America*, where, when the Cattle happen to feed upon the Leaves, it occaſions great Diſorders in them. The Seeds of this Plant were ſent me by Mr. *John Bartram* from *Philadelphia :* It has a perennial Root, from which ariſes an upright Stalk Five or Six Feet high, branching out on the Sides. The lower Leaves are large, and divided into Three Lobes to the Footſtalk : Theſe are cut on their Borders into acute Segments : They are a little hairy, and of a greyiſh Colour, ſtanding upon pretty long Footſtalks. Thoſe which grow upon the Stalks are ſmaller, and not ſo deeply divided. The principal Stalk is terminated by a long looſe Spike of Flowers, which is often a Foot and Half long. The ſmaller Side-branches, which grow erect, have ſmaller Spikes. The Flowers are not much larger than thoſe of the common Larkſpur, and are of a pale blue Colour : Theſe have a two-leaved bearded Nectarium ſitting in the Center of the Petals, which has at firſt Sight the Reſemblance of a large Fly in the Tube of the Flower. This Plant flowers in *June* ; and in cool Seaſons there is frequently a Succeſſion of Flowers till the End of *Auguſt.* The Seeds ripen in the Autumn.

PLATE CCLI.

Hydrangea, *Flor. Virg.* 50. *Lin. Gen. Plant.* 492.

The Characters of this Genus are,

The Flower has a very ſmall permanent Empalement of One Leaf indented in Five Parts a, *and Five roundiſh Petals, which are equal, and a little larger than the Empalement* b. *It has Ten Stamina, which are longer than the Petals, and are alternately longer than each other* c, *terminated by roundiſh Twin Summits* d. *It has a roundiſh Germen ſituated under the Flower, with Two ſhort Styles, which are at a Diſtance from each other* e, *crowned by obtuſe permanent Stigmas. The Germen afterward turns to a roundiſh Twin Capſule, having many angular Veins, and the Two Styles like Two Horns on the Top* f, *having Two Cells* g, *which open tranſverſely* h, *and are filled with ſmall angular Seeds* i.

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Tenth Claſs, which includes thoſe *Plants whoſe Flowers have Ten Stamina and Two Styles.*

We know but One Species of this Genus, which is here repreſented.

Hydrangea, *Flor. Virg.* 50. We have no *Engliſh* Title for this Plant.

It grows naturally in *North America*, from whence it has lately been introduced into the *Engliſh* Gardens.

This has many ſhrubby Stalks ariſing from the ſame Root, which riſe Three or Four Feet high: They are four-cornered when young, and have a green Bark; but as they grow older they become taper, and have a light brown Bark. The Leaves are almoſt Heart-ſhaped; they are Three Inches long, and Two and a Half broad near the Baſe, where they are broadeſt, having many tranſverſe Veins, which run from the Midrib to the Borders, of a deep Green on their upper Side, and pale on their under, ſlightly ſawed on their Edges, and ending in acute Points: Theſe are placed by Pairs ſtanding upon long Footſtalks. The Branches are each terminated by a Corymbus of Flowers, which is compounded of many ſmaller. The Flowers are very ſmall, white, and have an agreeable Odour: They are compoſed of Five ſmall Petals of a roundiſh Form, which ſpread open, and are a little larger than the Empalement, ſo make no great Figure ſingly; but the whole Corymbus, which is large, makes a tolerable good Appearance at a ſmall Diſtance: And as every Branch is terminated by one of theſe, ſo when the Plants are large, and have many Stalks, they make a Diverſity in the Garden among Plants of equal Growth.

This Plant flowers in *July*; but the Summers are ſeldom warm enough to ripen their Seeds in *England*.

PLATE CCLII.

Asarina, *Tourn. Inſt. R. H.* 171. *Tab.* 76. *Chelone, Lin. Gen. Plant. Penſtemon, Mitch. Gen.* 14. Baſtard Aſarum.

The Characters of this Genus are,

The Empalement of the Flower is compoſed of Five ſhort acute-pointed Leaves a. *The Flower is of One Petal, and of the Lip Kind* b, *having a long cylindrical Tube, which is extended at the Chaps, convex on the upper Side, but almoſt plain below. The under Lip* c *is cut into Three obtuſe Segments at the Point; the upper is obtuſe, and divided ſlightly into Two obtuſe Parts at the Top* d: *It has Four Stamina; the Two inner, which are oppoſite,* e *and* f, *are almoſt the Length of the Petal; the Two outer are ſhorter: Theſe are terminated by oblong Twin Summits. In the Bottom of the Tube is ſituated an oval Germen ſupporting a ſingle Style* g, *crowned by an oblong Stigma* h. *The Germen afterward turns to an oval Capſule crowned by the Style* i, *having Two Cells* k *and* l, *which are filled with ſmall Seeds* m *and* n.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Third Claſs, which includes the *Herbs with an anomalous Flower of one Petal, which is tubulous and perſonated.* Dr. *Linnæus* ranges it in the Second Section of his Fourteenth Claſs, which contains the *Plants whoſe Flowers have Two long and Two ſhorter Stamina, and the Seeds are included in a Capſule.*

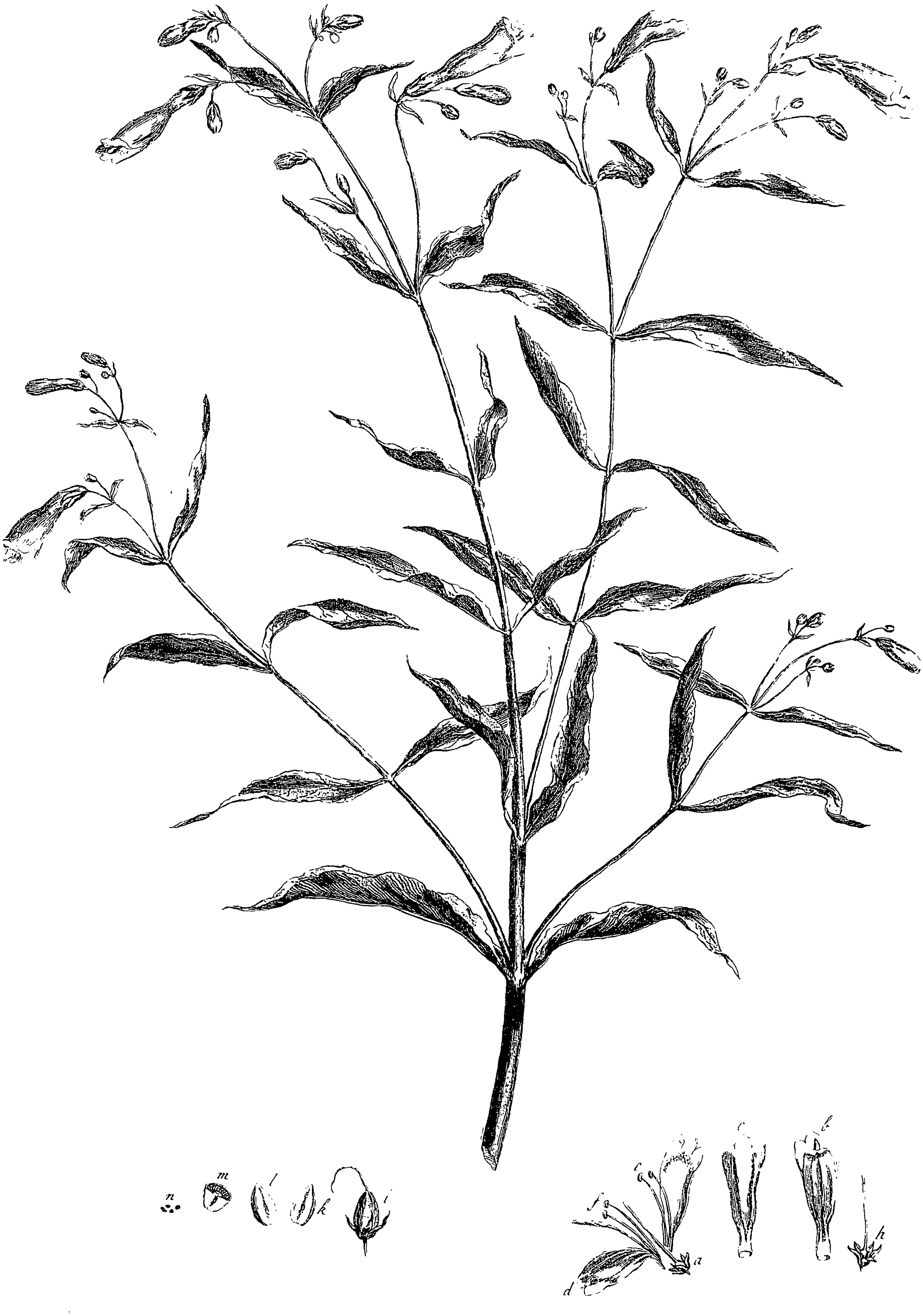
The Species here repreſented is,

Asarina *caule erecto, foliis lanceolatis amplexicaulibus, panicula dichotoma.* Baſtard Aſarum with an erect Stalk, and Spear-ſhaped Leaves embracing the Stalk. This is the *Chelone foliis amplexicaulibus, panicula dichotoma, Lin. Sp. Plant.* 612. Chelone with Leaves embracing the Stalks, and dichotomous Panicles of Flowers.

This is a biennial Plant, which grows naturally in *Virginia*. The Root is compoſed of many thick fleſhy Fibres, which ſpread out on every Side. The lower Leaves are about Three Inches long and Half an Inch broad, ſmooth, intire, and of a deep green Colour, ending in acute Points. The Stalk riſes upright a Foot and Half high, dividing into ſeveral Branches, which are garniſhed with narrow Spear-ſhaped Leaves placed oppoſite, whoſe Baſe embraces the Stalk: Theſe are nearly of the ſame Length with thoſe at Bottom, but are narrower. The Branches are terminated by looſe Panicles of purple Flowers, which ariſe at the Diviſion of the Branches: Theſe have very ſhort Empalements, which are compoſed of Five acute-pointed Leaves: The Flower is of One Petal, having a long Tube: The Bottom of this is contracted, but ſwells gradually upward, and at the Chaps is large: There it is divided into Two Lips; the upper is convex, and ends in Two blunt Segments; the under is almoſt plain, and is cut into Three obtuſe Segments at the Brim: They have Four Stamina, which are hid in the under Lip, Two of which are as long as the Tube of the Flower, the other Two are a little ſhorter. At the Bottom of the Tube is ſituated an oval Germen ſitting in the Empalement, ſupporting a ſlender Style the Length of the Stamina, crowned by a ſingle Stigma. Theſe Flowers appear in *June* and *July*, and the Seeds ripen in the Autumn, ſoon after which the Plants decay.

PLATE

Pl. CCLII.



Asarina, *caule erecto, foliis lanceolatis amplexicaulibus, panicula dichotoma.*

J. Miller delin et Sculp.

Publish'd according to Act of Parliament by P. Miller. August 25. 1758.

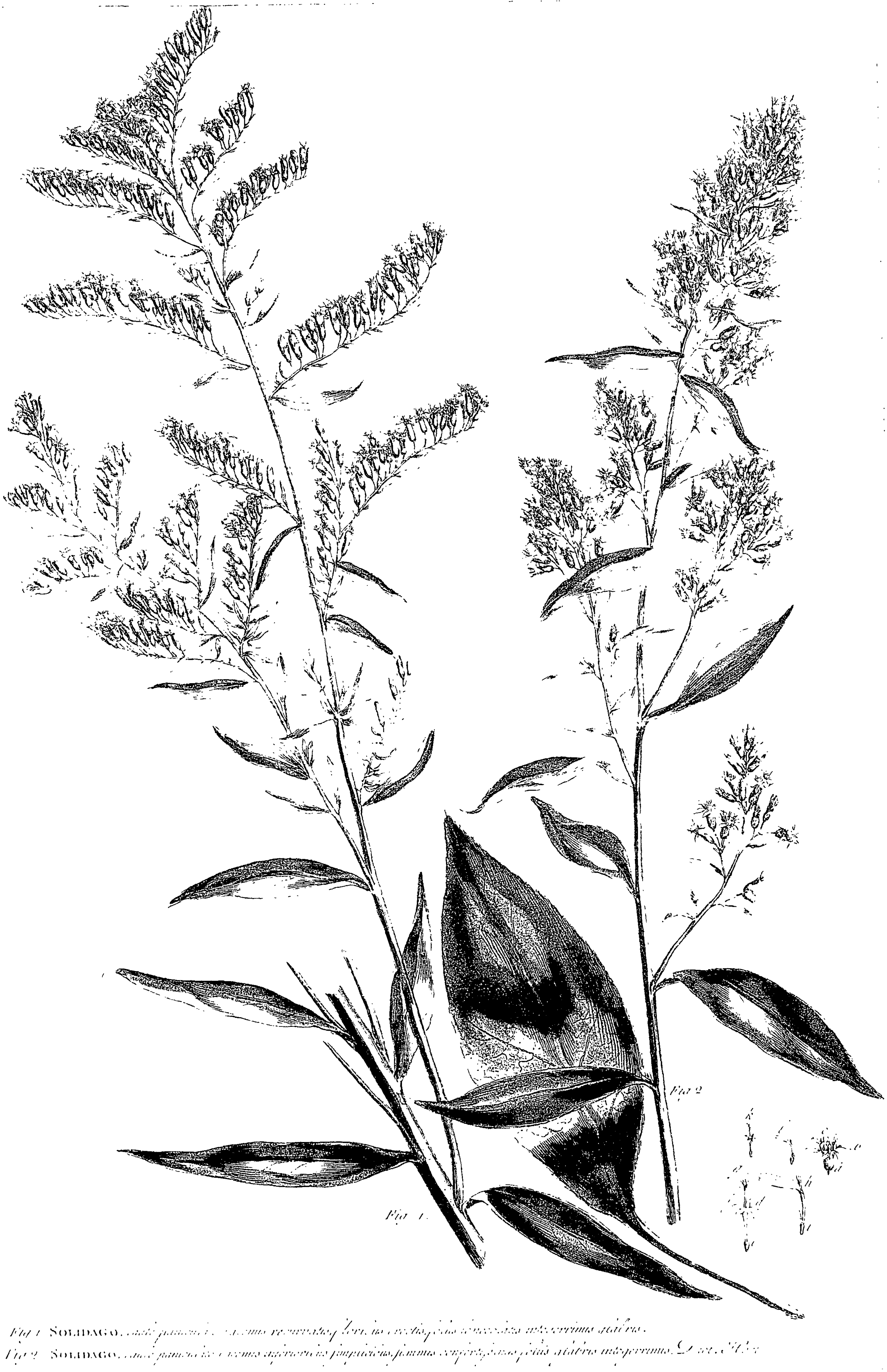


Fig. 1 SOLIDAGO, *caule paniculato, racemis recurvatis, floribus erectis, foliis lanceolatis integerrimis glabris.*
Fig. 2 SOLIDAGO, *caule paniculato, racemis superioribus simplicibus, summis confertis, foliis glabris integerrimis.* J. M. del. et sc.

J. Miller del. et sculp.

Publish'd according to Act of Parliament by J. Miller Septr. 28. 1758.

PLATE CCLIII.

SILIQUASTRUM, *Tourn. Inſt. R. H.* 646. *Tab.* 414. *Siliqua ſylveſtris, ſive Arbor Judæ. Raii Meth. Plant.* 162. *Cercis, Lin. Gen. Plant.* 458. The Judas Tree; in *French, Guainier.*

The Characters of this Genus are,

The Flower has a ſhort Bell-ſhaped Empalement of One Leaf, marked a, *which is gibbous within, and cut at the Brim into Five obtuſe Segments, which are erect. The Flower has Five Petals* b, *which are inſerted to the Empalement, and approach to the Butterfly Flowers in Shape. Two of the Petals are fixed by long Tails, and are erect, turning backward; theſe are like the Wings. The Standard is roundiſh, and has a ſhort Tail under the Wings. The Keel is compoſed of Two Heart-ſhaped Petals joined, and includes the Parts of Generation, which are fixed to their Tails. Under the Germen is ſituated a Style-ſhaped Honey Gland. It has Ten diſtinct Awl-ſhaped Stamina* c, *which decline; Four of which are longer than the others, terminated by oblong declining Summits; and a narrow Spear-ſhaped Germen ſitting upon a ſlender Style* d, *crowned by an obtuſe Stigma. The Germen afterwards turns to an oblong Pod, with an oblique Point* f, *having One Cell opening with two Valves* g, *incloſing One Row of roundiſh compreſſed Seeds* h, *faſtened to the upper Seam of the Pod.*

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Twenty-ſecond Claſs, which includes the *Trees and Shrubs with a Butterfly Flower, having ſingle Leaves diſpoſed in an alternate Order, or in Whorles round the Branches.* Mr. *Ray* places it among the Trees with Butterfly Flowers bearing Pods, which have ſingle Leaves. Dr. *Linnæus* places it in the Firſt Section of his Tenth Claſs, which includes thoſe Plants *whoſe Flowers have Ten diſtinct Stamina and One Style:* But it would, with more Propriety, come into his Seventeenth Claſs; for the Flower is ſhaped like the others of the Butterfly Kind, and the Four longer Stamina of the Flowers, being joined, do compoſe the Two Bodies.

The Specie here repreſented is,

SILIQUASTRUM, *Caſt. Durant.* 451. The common Judas Tree. *Caſpar Bauhin* titles it *Siliqua ſylveſtris rotundifolia, Pin* 402. Round-leaved wild Siliqua. *John Bauhin* titles it *Judaica arbor, Hiſt.* 1. 433. and *Dodonæus, Arbor Judæ, Pemp.* 786. Doctor *Linnæus* has changed the generical Title, and calls it *Cercis foliis cordato-orbiculatis glabris, Hort. Cliff.* 156. *i. e.* Cercis with orbicular Heart-ſhaped ſmooth Leaves.

This Tree grows naturally in the *Levant*, and alſo in *Spain* and *Italy.* It riſes, with a ſtrong upright Stem, to the Height of Twelve or Fourteen Feet in *England*; but, in its native Climate, grows much taller. It is covered with a brown Bark, and divides into many irregular Branches, which are ſlender, and are garniſhed with round Heart-ſhaped ſmooth Leaves, placed without Order, and have long Foot-ſtalks. They are of a pale Green in the Spring, when they come out firſt, but afterwards change to a deeper Green on their upper Side, but are pale on their under Side. Theſe fall off in the Autumn. The Flowers come out on every Side the Branches in Cluſters, not only upon the young Branches, but alſo the old Branches are fully garniſhed with them, and frequently the Stem of the Tree is adorned with Flowers; which are rarely ſeen in other Sorts. Theſe are ſometimes produced upon branching Foot-ſtalks, which ſuſtain Three or Four Flowers, but they generally ſtand upon ſeparate Foot-ſtalks; many of which ariſe from the ſame Point. The Flowers are of a bright purple Colour; ſo when the Trees are well furniſhed with them, they make a fine Appearance. Theſe appear in *May*, when the Leaves of the Trees are ſmall, ſo they are not hid by the Leaves. They have a poignant Taſte, ſo are by many Perſons eaten in Sallads. The Birds are very fond of the mellous Liquor which is lodged in the Honey Gland; ſo if they are not prevented, will pick off all the Flowers to get at it, which frequently prevents the Trees from producing Pods; but if the Flowers are guarded from the Birds, they will be ſucceeded by Pods, which, in warm Seaſons, do ripen very well here.

The *Spaniards* and *Portugueſe* title it the *Lovely Tree*, or *Tree of Love*; and we call it *Judas Tree*, from a Tradition, that it was the Tree which *Judas* hanged himſelf upon.

PLATE CCLIV.

SOLIDAGO, *Lin. Gen. Plant.* 859. *Virga aurea, Tourn. Inſt. R. H.* 483. *Tab.* 275. *Raii Meth. Plant.* 33. Golden Rod; in *French, Verge dorée.*

The Characters of this Genus are,

The Flower has a common imbricated Empalement a, *whoſe Scales are narrow, acute-pointed, and cloſe together. The Flower is radiated; the Border, or Rays* b, *is compoſed of Female Half-Florets, which are Tongue-ſhaped* h, l, *and the Diſk* c *is compoſed of Hermaphrodite Florets* d, k; *theſe are Funnel-ſhaped, and cut into Five acute Points at the Brim, which ſpreads open: They have Five Hair-like Stamina, terminated by cylindrical Summits* k, *and a crowned Germen* e, *ſupporting a ſlender Style* f, *crowned by Two Stigmas* g. *The Germen afterwards becomes an oval oblong Seed, crowned by a hairy Down. The Female Half-Florets have a crowned Germen* i, *but have no Stamina. The Style* h *is the Length of the Petal, and crowned by Two Stigmas. The Germen becomes a Seed like thoſe of the hermaphrodite Florets.*

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Nineteenth Claſs, which includes thoſe Plants *whoſe Flowers are compoſed of hermaphrodite Florets and female Half-Florets, which are all fruitful.*

fruitful. *Tournefort* places it in the Firſt Section of his Fourteenth Claſs, which contains the *Herbs with a radiated Flower, whoſe Seeds are crowned with Down.* Mr. *Ray* ranges it in the Firſt Section of his Seventh Claſs, which includes the *Herbs with a radiated diſcous Flower, whoſe Seeds have Down.*

The Specie here exhibited are,

Fig. 1. Solidago *paniculato, recemis recurvatis, floribus erectis, foliis lanceolatis integerrimis glabris.* Paniculated Solidago with recurved Spikes, having erect Flowers, and ſmooth Spear-ſhaped Leaves, which are intire.

This Plant grows naturally in *New Jerſey* in *America*, from whence the Seeds were ſent me by Mr. *John Bartram* in 1756. This riſes with an upright herbaceous ſmooth Stalk near Three Feet high, garniſhed with ſmooth Spear-ſhaped Leaves, ending with acute points: They are about Three Inches long, and One Broad in the Middle, drawing to a Point at each End, and ſit cloſe to the Stalk. They are of a light-green Colour. The upper Part of the Stalk branches out into a Panicle, and theſe Branches have long Spikes of Flowers coming out from their Wings, which are recurved. The Flowers are ranged on one Side of the Footſtalk, and ſtand erect. They are of a bright yellow Colour, each Flower being compoſed of Five or Seven Half-Florets, which form the Ray or Border, and ſeveral hermaphrodite Florets placed in the Centre or Diſk. The Firſt have ſhort Tubes, which end in One Segment ſhaped like a Tongue, as is repreſented at *b*; the latter have Tubes about the ſame Length, which are Funnel-ſhaped, the Petal being equal, and cut into Five acute Segments at the Top, which ſpread open flat, as is ſhewn at *d*. Both theſe are ſucceeded by ſingle oblong Seeds, which are crowned with a hairy Down.

This Sort flowers the Beginning of *Auguſt*, and, if the Autumn proves favourable, the Seeds will ripen the End of *September*.

Fig. 2. Solidago *caule paniculato, racemis inferioribus ſimplicibus, ſummis confertiſſimis, foliis glabris integerrimis, Dict. Hort.* Solidago with a paniculated Stalk, the lower Spikes of Flowers ſingle, the upper growing in Cluſters, and ſmooth intire Leaves.

This Sort grows naturally at *Philadelphia*, from whence the Seeds were ſent me by Dr. *Benſel*. This riſes with a branching herbaceous Stalk Three Feet high, which is garniſhed with ſmooth Leaves. Thoſe on the lower Part of the Stalk are Five Inches long, and Two broad in the Middle, drawing to a Point at each End. Theſe ſtand upon pretty long Footſtalks, and are intire. They are of a deeper green Colour than thoſe of the former Sort. Thoſe Leaves on the upper Part of the Stalk are much ſmaller, and have ſhorter Footſtalks. The Flowers are produced in ſingle looſe Spikes from the lower Part of the Stalk at the Wings of the Leaves; but, toward the Top of the Stalks, they are in ſhorter Spikes, which come out in Cluſters from the Wings of the Stalk, and alſo at the Top. The Flowers are of a bright yellow, and are compoſed of hermaphrodite Florets, and female Half-Florets, as thoſe of the other Specie.

This Sort flowers the latter End of *Auguſt* and the Beginning of *September*, and, in warm Seaſons, the Seeds will ripen in *England*.

PLATE CCLV.

Solidago *foliis lanceolatis, ſubcarnoſis, glaberrimis, margine ſcabriuſculis, panicula corymboſa, Lin. Sp. Plant.* Solidago with Spear-ſhaped almoſt fleſhy Leaves, which are very ſmooth, having rough Edges, and the Panicle of Flowers diſpoſed in a roundiſh Bunch. This is the *Solidago maxima Cornut. Canad.* 168. The largeſt Woundwort of *Cornutus*. Dr. *Tournefort* titles it *Virga aurea Canadenſis, latiſſimo folio glabro, Inſt. R. H.* 485. and, in the *Hiſtoria Oxonienſis*, it is titled *Virga aurea Canadenſis, foliis carnoſis non ſerratis latioribus, p.* 3. 124. *Canada* golden Rod with broader fleſhy Leaves not ſawed.

THIS Sort grows naturally in many Parts of *North America*; but, being firſt brought to *Europe* from *Canada*, it was titled from that Country. This Plant has been long an inhabitant in the *Engliſh* Gardens, and is One of the lateſt in Flower of any Sorts yet known, ſeldom ſhewing its Flowers till late in *October*; ſo that, unleſs the Autumn proves favourable, the Stalks are pinched by the Froſt before the Flowers blow.

It has thick fleſhy Stalks of a purpliſh Colour, which frequently riſe Six Feet high in good Ground, and are garniſhed with Spear-ſhaped Leaves, which are thick, fleſhy, of a deep green Colour, and very ſmooth; but their Edges are a little rough to the Touch. They are Ten Inches long, and an Inch and half broad, drawing to a Point at each End. The Flowers terminate the Stalk in a roundiſh Panicle or Corymbus. The common Empalement of the Flower is longer than of moſt of the other Species of this Genus; and the Scales are ſmoother, as is repreſented at *a*. The Rays of the Flower *b* are much narrower in Proportion to their Size. The Florets, which form the Diſk *c*, are large, and their Segments *d* are not ſo acute as in the former. The Germen *e* is ſituated at the Bottom of the Floret, ſupporting a ſlender Style, crowned by a forked Stigma *f*. The Female Half-Florets have their Petals extended in Length on one Side in Shape of a Tongue *g*, and at the Bottom of the Tube is ſituated the Germen *h*, crowned with hairy Down, which afterwards becomes an oblong Seed *i*, crowned with hairy Down *k*; but theſe ſcarce ever ripen in *England*, unleſs the Plants are ſheltered from Froſt.

PLATE CCLVI.

SPIRÆA, *Lin. Gen. Plant.* 554. *Tourn. Inſt. R. H.* 618. *Tab.* 389. *Raii Meth. Plant.* 158.

The Characters of this Genus are,

The Flower has a permanent Empalement of One Leaf a, *cut half-way into Five acute Segments. It has Five oblong Petals* b, *which are inſerted in the Empalement, and above Twenty ſlender Stamina* c, *which are ſhorter than the Petals, and are inſerted in the Empalement, terminated by roundiſh Summits. It has Five or more Germina* d, *each ſupporting a ſlender Style the Length of the Stamina repreſented at* e, *crowned by headed Stigmas* f. *The Germen afterwards becomes an oblong acute-pointed Capſule* g, *which is compreſſed, and opens with Two Valves* h; *one of which is ſhewn ſeparate at* i, *and is cut tranſverſely at* k, *incloſing ſmall oblong Seeds, repreſented at* l.

THIS Genus of Plants is ranged in the Fourth Section of *Linnæus*'s Twelfth Claſs, which includes thoſe *Plants whoſe Flowers have about Twenty Stamina, which are inſerted in the Empalement. Tournefort*'s Genus of *Spiræa* is placed in the Fifth Section of his Twenty-firſt Claſs, which contains the *Trees and Shrubs with a Roſe Flower, whoſe Pointal becomes a Pod.* Mr. *Ray* places it among his miſcellaneous Trees and Shrubs, in his Appendix.

The Specie here repreſented is,

SPIRÆA *foliis ternatis ſerratis ſubæqualibus, floribus ſubpaniculatis, Lin. Sp. Plant.* 490. Spiræa with trifoliated ſawed Leaves almoſt equal, and Flowers almoſt diſpoſed in Panicles. This is the *Filipendula foliis ternatis, Hort. Cliff.* 191. Dropwort with trifoliate Leaves. Doctor *Plukenet* and Mr. *Ray* title it, *Ulmaria major trifolia, flore amplo pentapetalo, Virginiana Alm.* 393. *Raii Sup.* 330. Greater Three-leaved *Virginia* Meadowſweet, with a large Flower of Five Petals. Doctor *Morriſon* titles it *Ulmaria Virginiana trifolia, floribus candidis, amplis, longis & acutis, Hiſt.* 3. *p.* 323. Three-leaved *Virginia* Meadowſweet with large white Flowers, which are long and pointed.

This Plant grows naturally in *North America*, but is now pretty common in the *Engliſh* Gardens. It has a perennial Root, but the Stalks are annual, and decay every Autumn. When the Roots are large, they ſend up Three, Four, or more branching Stalks, which riſe a little more than a Foot high, which are garniſhed at each Joint with One or Two Leaves, compoſed of Three oval Spear-ſhaped Lobes ending in acute Points. Theſe are ſtrongly ſawed on their Edges. They are near Two Inches long, and Three Quarters of an Inch broad in the Middle, of a bright green on their upper Side, but pale on their under, and ſit cloſe to the Stalk. The Flowers are diſpoſed in looſe Particles at the End of the Branches, each ſtanding upon a pretty long ſlender Footſtalk. They have Five long Spear-ſhaped Petals, whoſe Tails are inſerted in the Empalement, as is repreſented in the Figure *c*, *d*, which is One of the Empalements with the Germen and a Petal magnified, and cut through lengthways. Within the Petals are ſituated about Twenty ſhort Stamina, terminated by roundiſh Summits, and Five Germina at the Bottom of the Tube, ſupporting ſo many ſlender Styles, crowned by headed Stigmas. After the Flowers are paſt, the Germen turns to a Fruit, compoſed of Five acute-pointed Capſules, repreſented at *g*, each opening with Two Valves, as is ſhewn at *h*. Theſe contain a few oblong Seeds, repreſented at *l*.

This Plant flowers in *July* and *Auguſt*, and the Seeds ripen the End of *September*.

PLATE CCLVII.

Fig. 1. SPIRÆA *foliis lanceolatis, inæqualiter ſerratis, ſubtus tomentoſis, floribus duplicato racemoſis, Lin. Sp. Plant.* 489. Spiræa with Spear-ſhaped Leaves, which are unequally ſawed, and downy on their under Side, and Flowers in double Spikes. This is the *Ulmaria pentacarpos, integris ſerratis foliis parvis ſubtus incanis, Virginiana, Plukn. Alm.* 39. *Virginia* Meadowſweet with Five Capſules, and ſmall intire ſawed Leaves, hoary on their under Side.

THIS grows naturally in ſeveral Parts of *North America*, particularly at *Philadelphia*. It is a low ſhrubby Plant. The Stalks are ſlender, and have a purple Bark. They ſend out ſlender Branches from their Side almoſt to the Ground. Theſe are garniſhed with ſmall oval Spear-ſhaped Leaves, about an Inch and half long, and half an Inch broad in the Middle. They are of a light green on their upper Side, but downy on their under. Their Edges are unequally ſawed. The Branches are terminated by branching Spikes of Flowers of a bright red Colour. They have a ſmall Empalement of One Leaf, repreſented at *a*, which is cut at the Brim into Five ſmall Segments, which ſpread open. The Flower has Five ſmall roundiſh Petals, repreſented at *b*, which expand in Form of a Roſe, and within are ſituated a great Number of ſhort Stamina, repreſented at *c*, which are terminated by roundiſh Summits *d*. In the Centre is ſituated the Five-pointed Germen, ſupporting ſo many Styles, repreſented at *e*, which are magnified in the adjoining Figure. The Germen afterwards becomes a Fruit compoſed of Five acute pointed Capſules *g*, which is magnified at *i*. Theſe open with Two Valves *h*, in the ſame manner as the other Species, containing ſeveral ſmall Seeds.

It flowers in *June* and *July*, and the Seeds ripen in Autumn.

Fig. 2. SPIRÆA *foliis lanceolatis acute ſerratis, floribus paniculatis, caule fruticoſo, Dict. Hort.* Spiræa with Spear-ſhaped Leaves, which are acutely ſawed, Flowers diſpoſed in Panicles, and a ſhrubby Stalk.

This has a ſhrubby Stalk covered with a bright brown Bark, and riſes Five or Six Feet high, ſending out many ſlender horizontal Branches on every Side, which are garniſhed with Spear-ſhaped Leaves of a thin Conſiſtence, and a bright green Colour on both Sides. They are ſharply ſawed on the Edges, ſtanding upon ſhort Foot-ſtalks. The Flowers are diſpoſed in Panicles at the End of the Branches. They are compoſed of Five ſmall roundiſh white Petals, with many ſhort Stamina, terminated by roundiſh red Summits, and Five Styles, like the other Species, with which this Sort agrees in its Fructification.

It flowers in *July* and *Auguſt*, but rarely produces good Seeds in *England*. This Sort grows naturally in *North America*, from whence I have received it.

PLATE CCLVIII.

STAPELIA, *Lin. Gen. Plant.* 271. *Aſclepias, Tourn. Inſt. R. H.* 94. *Tab.* 22. Swallow-wort, or *Fritillaria craſſa.*

The Characters of this Genus are,

The Empalement of the Flower is permanent, of One Leaf, cut into Five acute Segments, as is repreſented at a. *The Flower had One large plain Petal, which is deeply cut into Five acute Segments* b, *and a five-pointed ſtarry Nectarium* c, *with narrow torn Segments, which ſurround the Parts of Generation. It has Five plain, broad, erect Stamina, with linear Summits* d, *faſtened on each Side the Stamina, and Two oval plain Germina having no Style, crowned by a blunt Stigma. The Germina afterwards turn to Two oblong taper Pods, filled with compreſſed Seeds, crowned with a feathery Down, lying over each other like the Scales of Fiſh.*

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Fifth Claſs, which includes the Plants *whoſe Flowers have Five Stamina and Two Germina, or Styles.* Dr. *Tournefort* places it in the Fifth Section of his Firſt Claſs, which contains the *Herbs with a Bell-ſhaped Flower of One Petal, whoſe Pointal becomes a Fruit compoſed of ſeveral little Sheaths or Huſks.* Doctor *Linnæus* ſeparates this from the *Swallow-wort*, for the Difference of the double ſtarry Nectarium, which the Flowers of this Genus have.

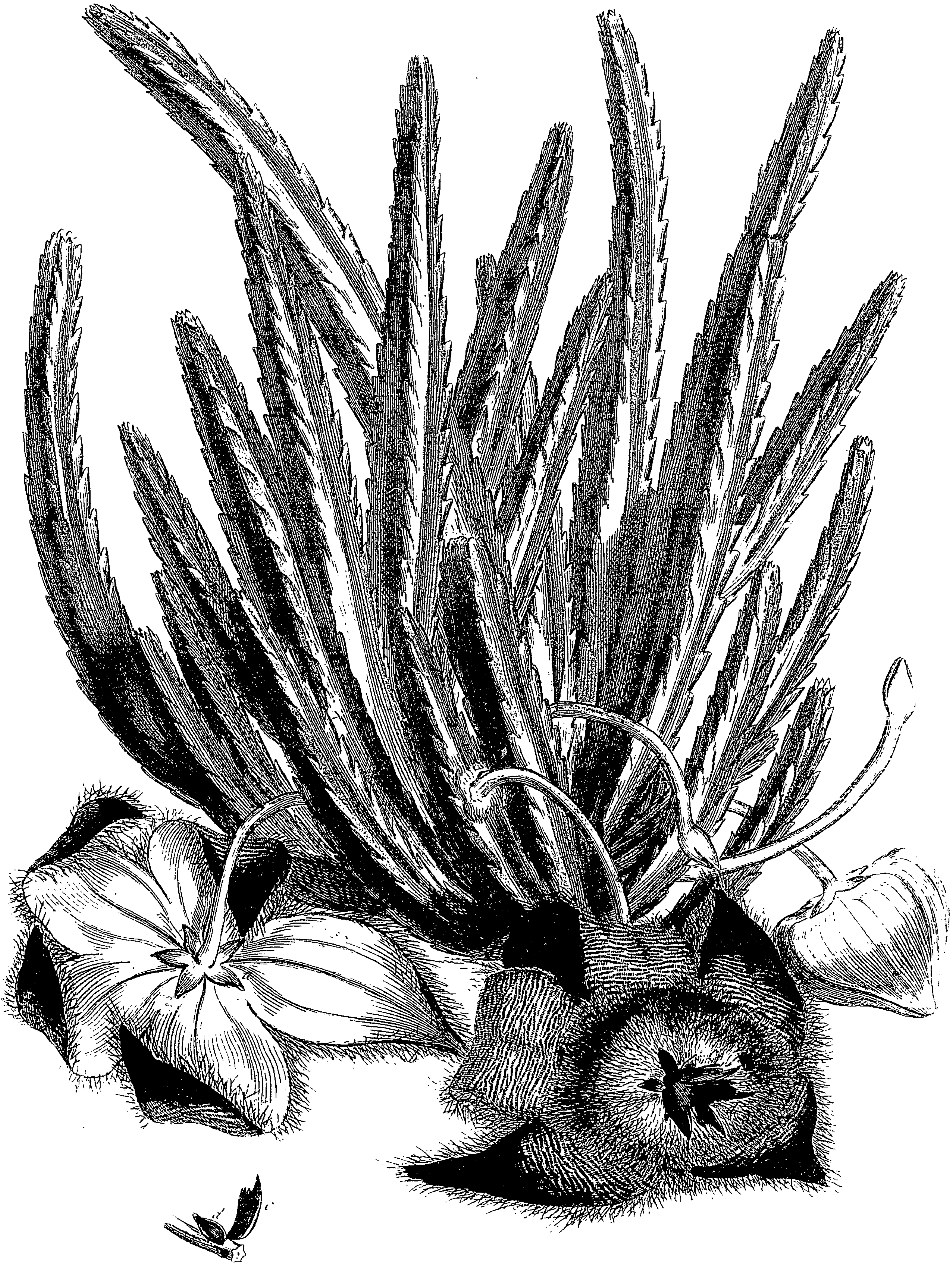
The Specie here repreſented is,

STAPELIA *denticulis ramorum erectis, Hort. Cliff.* 77. Stapelia with erect Indentures on the Branches. This is the *Aſclepias Africana aizoides, flore pulchre fimbriato, Com. Rar. African* Swallow-wort like Houſeleek, with a fringed Flower. *Tournefort* titles it *Aſclepias Africana, aizoides, longioribus foliis, minus dentatis, Inſt. R. H.* 94. *African* Swallow-wort like Houſeleek, with longer Leaves leſs indented.

This Plant grows naturally upon the Rocks at the *Cape of Good Hope*, from whence it was firſt brought to the Gardens in *Holland*; but is now become common in moſt Parts of *Europe*.

The Root is compoſed of many ſtrong Fibres, from which ariſe ſeveral ſucculent four-cornered Stalks, which ſend out other Branches of the ſame Shape from their Side, which have Indentures on each Angle their whole Length, whoſe Points are erect. The Stalks or Branches are of a deep green Colour; but the Angles and Points of the Indentures are inclining to brown, eſpecially if the Plants are expoſed in the open Air in Summer. The Flowers come out from the Side of the Stalks, ſtanding upon long fleſhy Foot-ſtalks. They have ſmall permanent Empalements, which are cut into Five Segments; and One large plain Petal of a thick leathery Subſtance, which is deeply cut into Five acute Points. The Inſide of the Petal is variegated and hairy, and the Borders of the Segments are cloſely furniſhed with long brown Hairs. In the Centre is placed the double ſtarry Nectarium, whoſe Points ſeem as if they were torn, which covers the Stamina and Germen, and is of a purple Colour. The Outſide of the Petal is of an herbaceous pale Colour, and ſmooth. The Flowers of this Sort are not ſucceeded by Pods in *England*; but the ſmaller Sort have ſometimes produced Pods here, which are long, taper, and pointed, agreeing perfectly with the Characters before given. This Plant flowers during great Part of the Summer.

The Flower, when fully expanded, has a very fœtid Odour, ſo like that of Carrion as to deceive the common Fleſh Flies, who depoſit their Eggs all round the Nectarium in great Plenty. Theſe do frequently come to have Life, and move, but very ſoon die for want of Proviſion. I have very frequently watched them to ſee their Progreſs; and, unleſs the exact Time of their Hatching is taken, their Time of Life is ſo ſhort as not to be obſerved. There have been ſome ſo hardy as to aſſert, that the Maggots hatched from the Eggs have eaten the Petals of the Flower, and have changed to the State of Flies; but, from more than Forty Years Obſervation on this Plant, I have not been able to diſcover the leaſt Sign of their attempting to eat it; nor has any other Perſon of Credit among all my Acquaintance.



STAPELIA *denticulis ramorum erectis. Hort. Cliff. 77.*

J. Miller delin. et Sculp.

Published according to Act of Parliament by P. Miller [illegible]

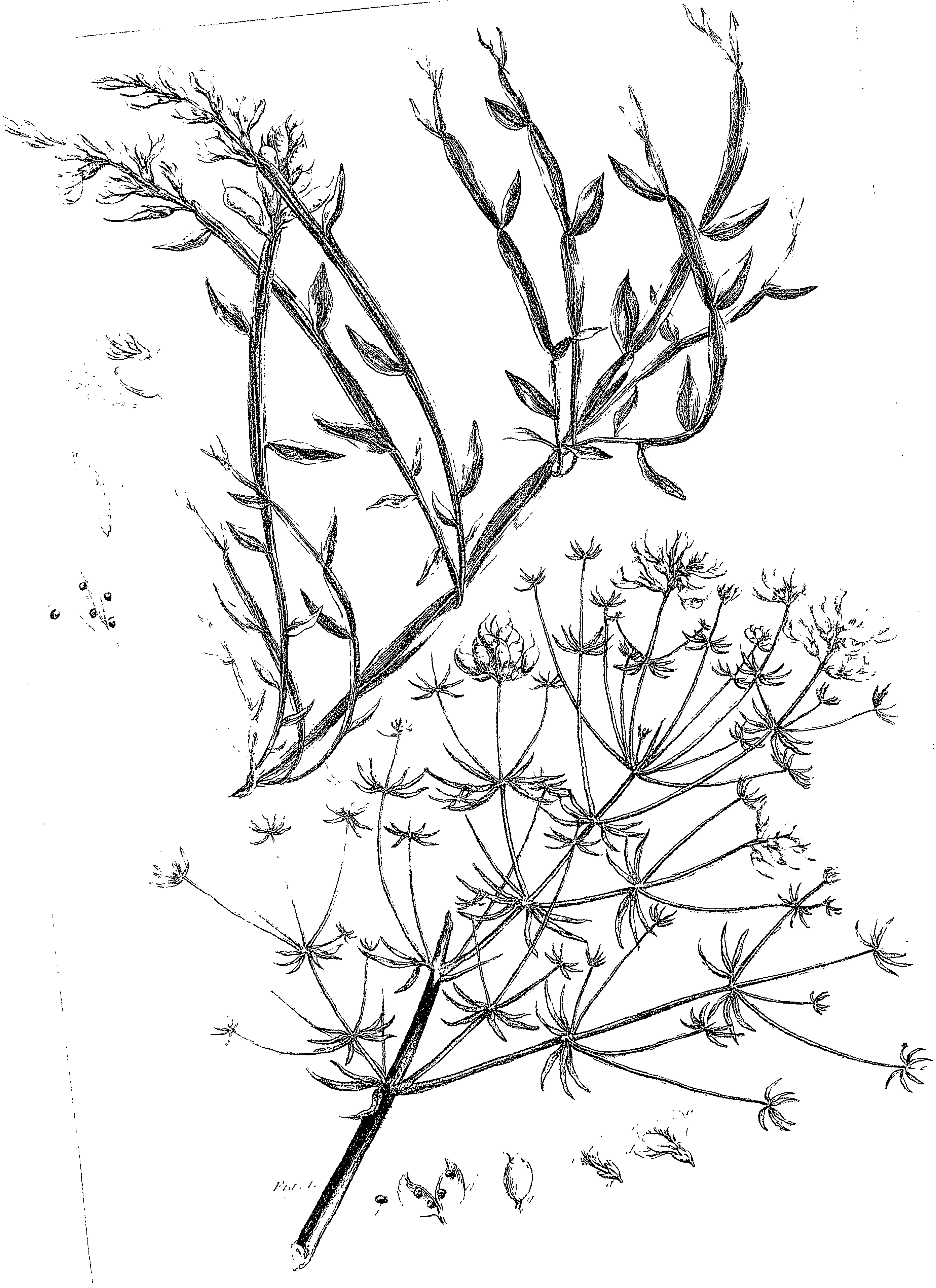
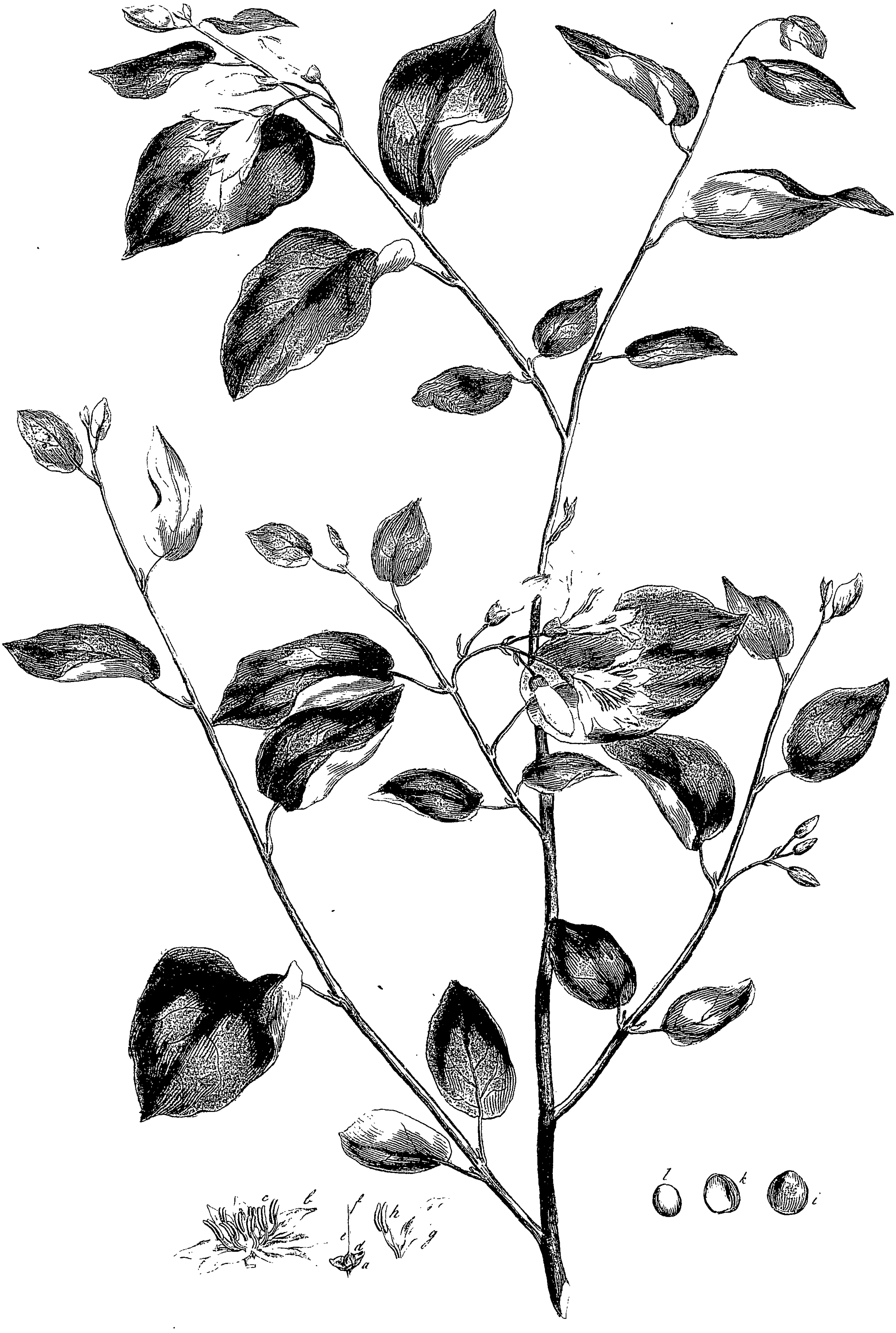


Fig. 1. SPARTIUM, ramis oppositis ar[illegible] [illegible] Lin. Sp. plant. 708.

Fig. 2. GENISTA, ramis [illegible] foliis [illegible] Hort. Cliff. 353.



STYRAX *Hort. Cliff. 187.*

J. Miller. delin et Sculp.

Publish'd according to Act of Parliament by P. Miller Oct.r 26. 1758.

PLATE CCLIX.

SPARTIUM, *Tourn. Inſt. R. H.* 644. *Tab.* 412. *Raii Meth.* 161. *Lin. Gen. Plant.* 765. Broom.

The Characters of the Genus are,

The Empalement of the Flower a, *is Heart-ſhaped, tubulous, of One Leaf, with a very ſhort Margin at the Top, indented in Five Parts; but thoſe Indentures under the Flower are extended. The Flower is of the Butterfly Kind. The Standard* b *is large, almoſt Heart-ſhaped, and intirely reflexed. The Wings* c *are oblong-oval, ſhorter than the Standard, and join to the Stamina. The Keel* d *is oblong, and extended beyond the Wings: The Borders are connected, and ſhut up the Stamina. It has Ten unequal Stamina* e, *Nine of which are joined, and One ſtands ſeparate, terminated by oblong Summits; and an oblong hairy Germen, ſupporting a riſing Awl-ſhaped Style* f, *having an oblong hairy Stigma. The Germen afterward turns to an obtuſe cylindrical Pod* g, *of One Cell, opening with Two Valves* h, *including Two or Three globular Kidney-ſhaped Seeds* i.

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort*'s Twenty-firſt Claſs, which includes the *Trees and Shrubs with a Butterfly Flower, whoſe Leaves are either ſingle and alternate, or diſpoſed in Whorles round the Stalks.* Mr. *Ray* places it in his Claſs of *Trees with a Butterfly Flower bearing Pods, whoſe Leaves are ſingle.* Dr. *Linnæus* ranges it in the Third Section of his Seventeenth Claſs, which includes thoſe *Plants whoſe Flowers have Ten Stamina joined in Two Bodies.*

The Species here repreſented is,

Fig. 1. SPARTIUM *ramis oppoſitis angulatis, foliis oppoſitis ſubulatis, Lin. Sp. Plant.* 708. Broom with angular Branches placed oppoſite, and Awl-ſhaped Leaves placed oppoſite. This is the *Spartium æquicolorum minimum montanum triphyllon, Col. Ecphr.* 1. *p.* 295. The leaſt Mountain Three-leaved Broom. *John Bauhin* titles it *Geniſta radiata ſive ſtellaris, Hiſt.* 1. *p.* 399. Radiated or ſtarry Broom.

This grows naturally in *Italy* upon the Mountains, where it is a low ſhrubby Plant; but when it is cultivated in Gardens it becomes much larger, tho' it rarely exceeds Two Feet and a Half in Height; but the Branches extend to a conſiderable Diſtance each Way: Theſe are angular and pliable, and always come out by Pairs oppoſite. The Leaves are trifoliate, narrow, and Awl-ſhaped: Theſe are alſo placed oppoſite on the Branches, and their Points ſpread open like the Rays of a Star; from whence *John Bauhin* gave it the above Title. The Flowers are produced in ſhort Spikes at the End of the Branches: They are of a bright yellow Colour, and ſhaped like thoſe of the other Butterfly Kind. Theſe appear at the End of *June* and in *July*, and are ſucceeded by ſhort hairy Pods, which include Two or Three roundiſh Kidney-ſhaped Seeds, which ripen at the End of *Auguſt*. This humble Shrub makes a pretty Appearance during the Time of its continuing in Flower; ſo deſerves a Place in every good Garden.

Fig. 2. GENISTA, *Lin Sp. Plant.* 766. *Geniſtella, Tourn. Inſt. R. H.* 646. *Tab.* 413. *Raii Meth.* 162. Petty Broom.

The Characters of this Genus are,

The Empalement of the Flower is ſmall, tubulous, and of One Leaf a, *almoſt divided into Two Lips: The upper Lip is deeply cut into Two narrow Segments* b, *and the under into Three equal Segments. The Flower is of the Butterfly Kind: The Standard is oval, acute-pointed, and is remote from the Keel; the Wings are oblong, ſhort, and looſe; the Keel is long, and indented at the Point: It has Ten unequal Stamina* d *and* e, *which ariſe from the Keel, and are joined in Two Bodies, terminated by ſingle Summits; and an oblong Germen, ſupporting a ſingle riſing Style* b, *crowned by an acute Stigma* c. *The Germen afterward turns to an oblong turgid Pod* g, *with One Cell opening with Two Valves* h, *including Three or Four roundiſh Kidney-ſhaped Seeds* i.

This Genus of Plants is ranged in the ſame Claſs and Section of *Linnæus*'s Method as the former; from which he ſeparates the Plants of this Genus, *becauſe the Empalement of the Flower is deeply divided into Two Lips, which are cut into acute Points, and the Standard of the Flower is oblong. Tournefort* ſeparates this from the Genus of *Broom*, from the Form of the Leaves, which are jointed, and conſtitutes a Genus by the Title of *Geniſtella*; in which he is followed by Mr. *Ray*.

The Species here repreſented is,

GENISTA *ramis ancipitibus articulatis, foliis ovato lanceolatis, Lin. Sp. Plant.* 708. Broom with jointed Branches on both Sides alike, and oval Spear-ſhaped Leaves. This is the *Geniſta herbacea ſive Chamæſpartium, J. B.* 1. *p.* 393. Herbaceous or Dwarf Broom. *Caſpar Bauhin* titles it *Chamæ-Geniſta ſagittalis, Pin.* 395. Dwarf Arrow-ſhaped Broom.

This Plant has flat jointed herbaceous Stalks, which ſpread flat on the Ground, and divide into many Branches of the ſame Form, which are garniſhed with oval Spear-ſhaped Leaves, about Three Quarters of an Inch long, and half as much in Breadth in the Middle, drawing to a Point at each End: They are of a deep green Colour, and ſmooth. The Flowers terminate the Branches in looſe Spikes: They are of a bright yellow Colour, and ſhaped like the other Butterfly Flowers: They appear the Beginning of *July*, and are ſucceeded by oblong flat Pods containing Three or Four roundiſh Kidney-ſhaped Seeds, which ripen in *September*. This is a perennial Plant, which thrives well in the open Air in *England*.

PLATE CCLX.

STYRAX, *Tourn. Inſt. R. H.* 598. *Tab.* 369. *Raii Meth.* 156. *Lin. Gen. Plant.* 527. The Storax-Tree.

The Characters of this Genus are,

The Empalement of the Flower a *is ſhort, cylindrical, and indented ſlightly in Five Parts at the Brim: The Flower is Funnel-ſhaped, having a very ſhort Tube, no longer than the Empalement, and is cut above into Six or Seven large Spear-ſhaped Segments* b, *which ſpread open. It has Nine or Ten ſhort erect Stamina, placed circularly, which are joined at their Baſe, and are inſerted to the Petals, terminated by oblong erect Summits* c, *and a roundiſh Germen* d *ſupporting a* *ſlender Style* e, *crowned by a truncated Stigma* f. *The Germen afterward turns to a roundiſh Berry* i, *with One Cell* k, *incloſing One or Two roundiſh Nuts* l.

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Twentieth Claſs, which includes the *Trees and Shrubs with a Flower of One Petal, whoſe Pointal turns to a Fruit pregnant with hard Seeds.* Mr. *Ray* places it among the Trees and Shrubs which bear Berries including ſeveral Seeds. Dr. *Linnæus* places it in the Firſt Section of his Eleventh Claſs, which includes thoſe *Plants whoſe Flowers have from Eleven to Nineteen Stamina incluſive, and One Style.*

The Species here repreſented is,

STYRAX, *Hort. Cliff.* The Storax-Tree. This is the *Styrax folio Mali Cotonei, C. B. P.* 452. Storax with a Quince-tree Leaf; and the *Styrax arbor, J. B.* 1. *p.* 341. Storax-Tree.

This Shrub grows plentifully in the Neighbourhood of *Rome*, and alſo in *Paleſtine*, and ſeveral of the Iſlands in the *Archipelago*.

This is a low ſhrubby Tree, whoſe Stalk is woody. It riſes Twelve or Fourteen Feet high, ſending out many ſpreading Branches on every Side, which are covered with a ſmooth grey Bark, and are garniſhed with oval Leaves about Two Inches long, and One and a Half broad, of a lucid Green on their upper Side, but hoary on their under: They are placed alternately, ſtanding upon ſhort Footſtalks; and their Edges are intire. The Flowers are produced in Cluſters upon ſhort Footſtalks, which ſpring from the Wings of the Stalk: Theſe branch into Five or Six ſmaller, each ſuſtaining One white Flower having One Petal, which is deeply cut into Six or Seven Spear-ſhaped Segments, which ſpread open: Within theſe are ſituated Nine or Ten ſhort erect Stamina, placed circularly, and are terminated by oblong erect yellow Stamina: And in the Tube of the Petal is ſituated a roundiſh Germen, ſupporting a ſlender Style crowned by a rough Stigma. The Germen afterward turns to a roundiſh Berry with a fleſhy Covering, including a Nut of the ſame Shape, which contains One or Two Kernels. This Shrub flowers in *June*, but is not ſucceeded by Berries in *England*.

The Gum of this Tree is uſed in Medicine; which is obtained by making Inciſions in the Tree. It is brought from *Turkey*; but is ſo adulterated with Dirt, that it is very difficult to meet with any that is pure. It has a moſt pleaſant fragrant Odour, and is called *Styrax Calamita*, becauſe it was brought over in hollow Canes.

PLATE CCLXI.

TACAMAHACA, *C. B. P. Populus, Lin. Gen. Plant.* 996. The Tacamahac-Tree.

The Characters of this Genus are,

It has Male and Hermaphrodite Flowers upon the ſame Tree. The Male Flowers a *are produced in One oblong imbricated cylindrical Katkin. There is One Flower under each Scale. The Scales are Wedge-ſhaped, and cut into Five Points* e. *The Flowers have no Petals, but have an Empalement of One Leaf* c, *divided into Two Parts, with a great Number of ſhort Stamina* d, *unequal in Length, which are terminated by headed Summits* o. *The Hermaphrodite Flowers, which are produced at remote Diſtances from the Male on the ſame Tree, are diſpoſed in looſe Katkins* p, *which are ſcaly: The Scales are oval, obtuſe, and intire* n. *The Empalements of the Flower* i *are roundiſh, and waved on their Edges: They have no Petals, but have Two Stamina* k, *which are terminated by pyramidal Summits. The Germen ſupports a large Style* l, *which is crowned by an obtuſe Stigma* m. *The Germen afterward turns to an oblong acute-pointed Capſule, very glutinous.*

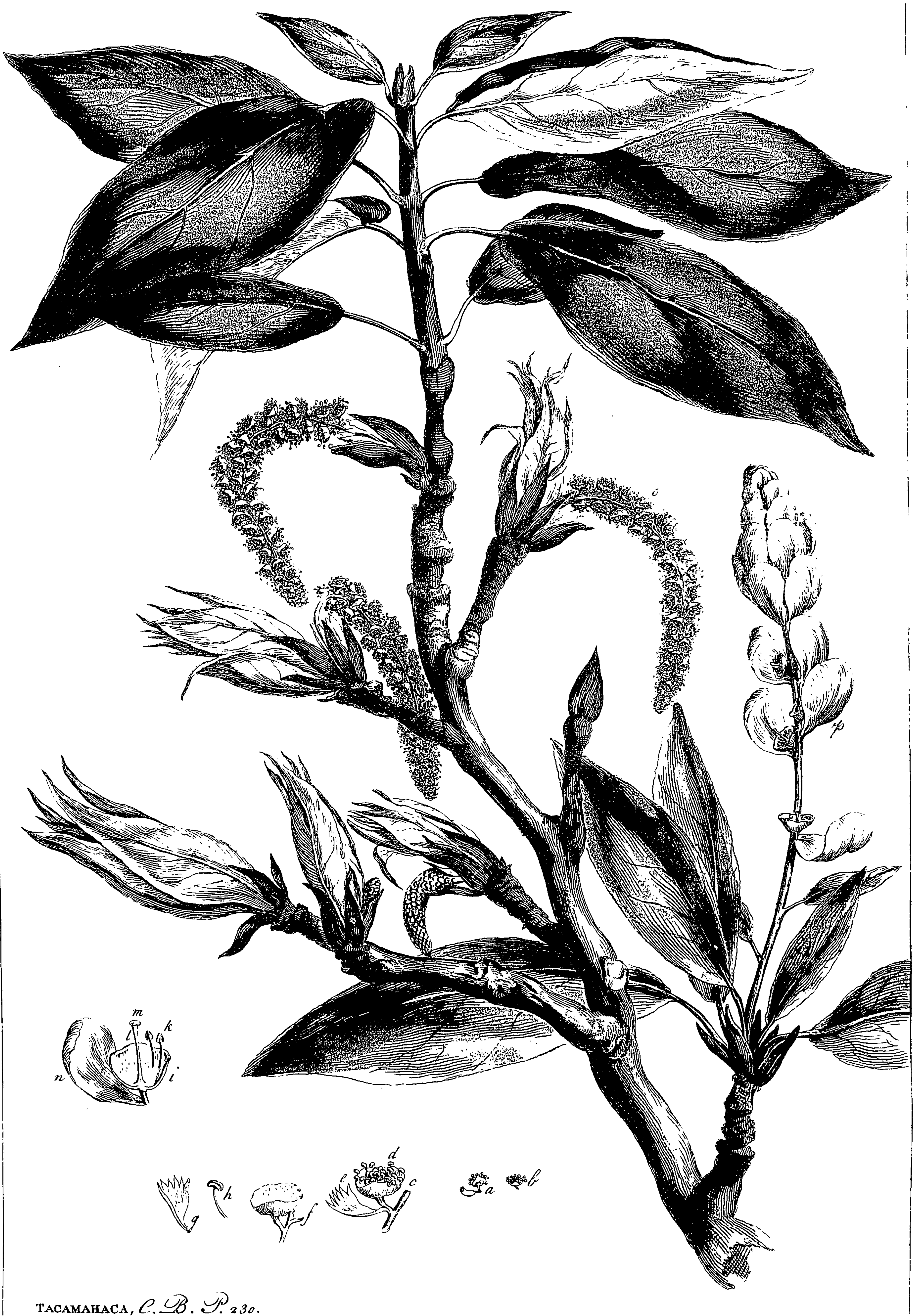
THIS Plant is included in Dr. *Linnæus*'s Genus of *Poplars*, to which, by its outward Appearance, it has great Affinity: But as the *Poplar* is Male and Female in diſtinct Plants, and this has both Sexes in the ſame Plant; ſo by his own Syſtem it muſt be removed from that Genus, and placed in the Eighth Section of his Twenty-firſt Claſs, which includes thoſe *Plants which have Flowers of both Sexes, and the Male Flowers have many Stamina.*

This Tree is a Native of *Canada*, and ſome other Parts of *North America*; from whence the Reſin was brought to *Europe*, and uſed in Medicine. It is doubtful whether there are not Two Species of this Tree, One of which grows naturally at *Mexico*. The Reſin of this Tree was brought over in dry Lumps, and would crumble at firſt between the Teeth; but that of the Tree growing in *Canada* came over in Shells; and was ſmooth, of One Texture, and in Colour like ſtrained Galbanum, but lighter, and of a pleaſant Scent.

This Tree was brought from *Canada* to the Iſland of *Jerſey*, where it was propagated; and Six of the Plants were ſent from thence to the late Queen *Caroline*, in the Year 1731, as a Preſent, by the Title of *Abre de la Reine*, with an Account how they ſhould be propagated. One of theſe Trees was by the Queen given to the late Sir *Hans Sloane*, Bart. and is now growing in the *Chelſea* Garden. This has produced Male Katkins ſeveral Years; but till this Year there was no Appearance of any Female or Hermaphrodite Flowers; and theſe being the firſt which have appeared in *Europe*, ſo far as I can learn, were thought worthy of being exhibited to the Public.

By the Growth of this Tree in *Europe*, it ſeems not to be one of a very large Size; for that which is now growing in the *Chelſea* Garden is not more than Sixteen Feet high, and the Stem is not larger than the Calf of a Man's Leg. The Bark is ſmooth, like that of the Black Poplar; and the young Branches have much the ſame Appearance, but their annual Shoots are ſeldom more than a Foot in Length. The Leaves reſemble thoſe of the Pear-Tree: They are about Four Inches long, and an Inch and Half broad in the Middle, drawing towards a Point at each End: Their Edges are intire; their upper Side of a deep Green, and their under Side hoary: They ſtand upon long ſlender Footſtalks, and are placed without Order upon the Branches. The Male Flowers come out from the Side of the Branches in long Katkins, as is repreſented at *o*; theſe have numerous Stamina, which are irregular in Height, and crowned with headed Summits of a purple Colour: Theſe appear in *April* and *May*, and fall off ſoon after. The Hermaphrodite Flowers are produced at the End of the Shoots, upon long ſlender Footſtalks, in very looſe Katkins, having a leafy Involucrum under each, as is repreſented at *p*, which is oval and intire; from the Boſom of which ariſes the Footſtalk of the Flower, which is very ſhort: Upon the Top is placed the Petal, according to ſome, or the Empalement, according to

Pl. CCLXI.



TACAMAHACA, *C. B. P.* 230.

J. Miller delin et Sculp.

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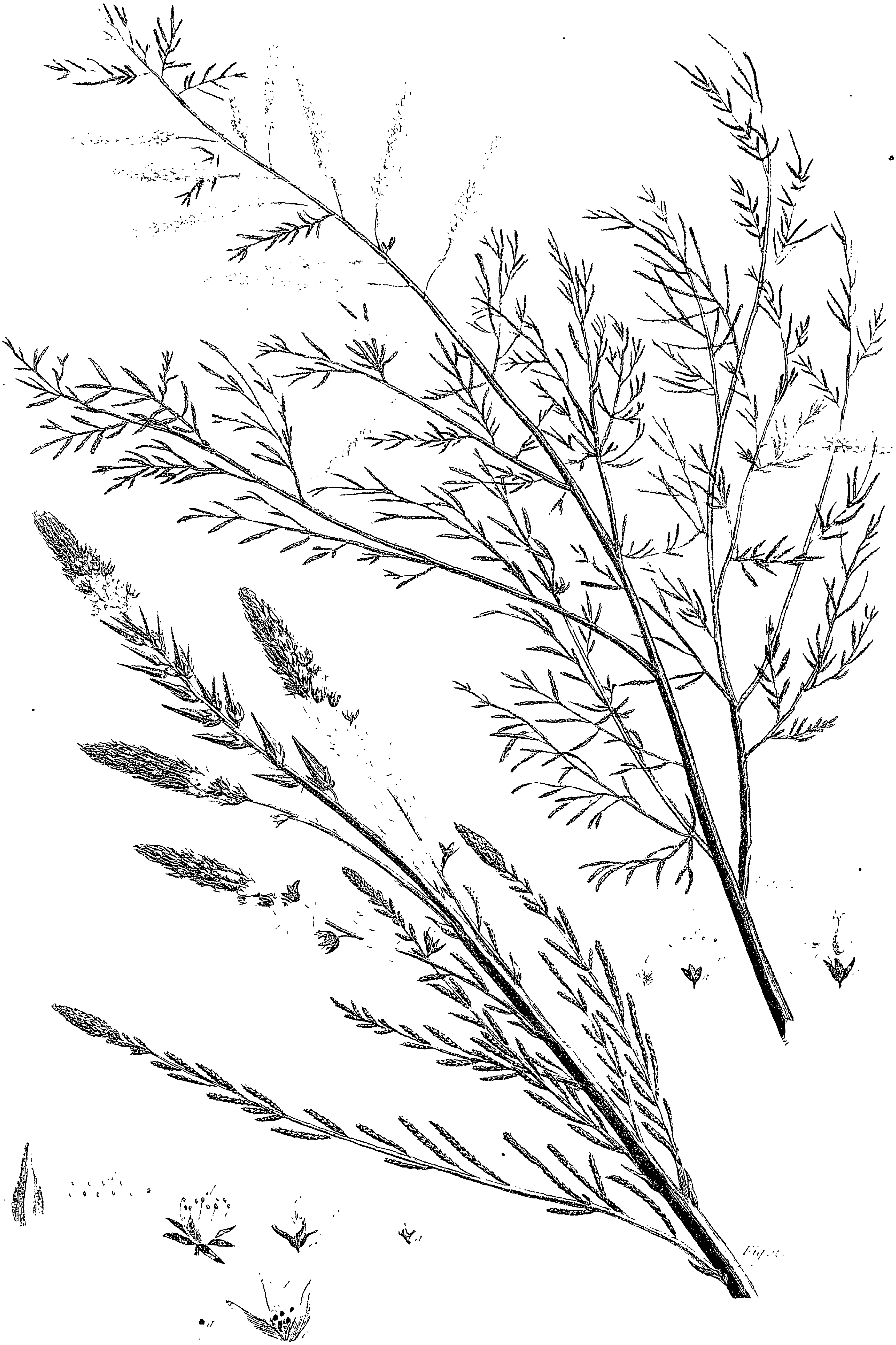

Fig. 1. TAMARIX, floribus pentandris. Hort. Cliff. 111.
Fig. 2. TAMARIX, floribus decandris. Hort. Cliff. 111.

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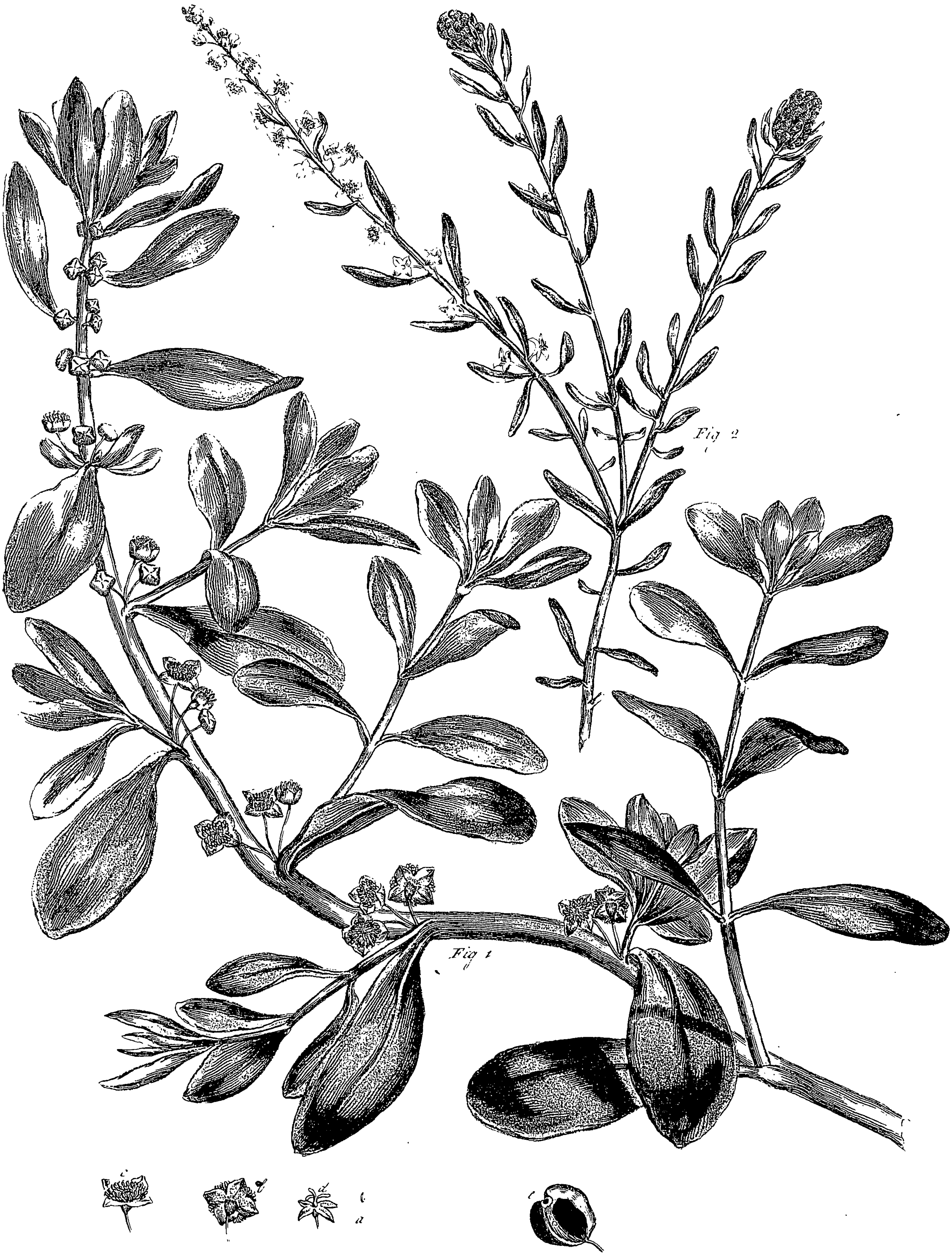

Fig. 1. TETRAGONIA *foliis ovatis integerrimis, caule fruticoſo decumbente.*

Fig. 2. TETRAGONIA *foliis linearibus Flor. Leyd. prod. 250.*

J. Miller. delin et Sculp.

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other Botaniſts, which is of One Piece, ſhaped like a wide Cup, having a large Style in the Center, and Two Stamina on one Side, which are terminated by pyramidal purple Summits. Theſe Hermaphrodite Flowers appear in *July*, and are ſucceeded by oval Capſules terminated in a Point, incloſing downy Seeds. The ſcaly Covers of the Buds of this Tree abound with a tenacious Balſam or Turpentine in the Spring, which becomes liquid by Heat. It is of a yellowiſh Colour, and of a fragrant Scent.

In the *Gardeners Dictionary* this Tree is placed in the Genus of *Poplar*, to which, by its Male Flowers, it ſeemed to belong; but ſince the Hermaphrodite Flowers have appeared, which ſhew it is not of that Genus, nor of the Claſs in which that is ranged; ſo I have at preſent applied the *Indian* Title to it, as the Reſin of the Tree has been many Years called by that Name in the Shops.

It does not appear that this Tree has been long in *France*; for Monſieur *Du Hamel*, in his Book of hardy Trees and Shrubs, mentions it to have been lately planted in the Gardens there; where it had ſupported the Winter in 1754, which had killed many other Trees.

PLATE CCLXII.

TAMARIX, *Lin. Gen. Plant.* 337. *Tamariſcus, Tourn. Inſt. R. H.* 661. *Raii Meth. Plant* 158. Tamariſk; in French, *Tamaris.*

The Characters of the Genus are,

The Flower has a permanent Empalement, which is cut into Five obtuſe erect Segments a *and* b: *It has Five oval obtuſe concave Petals, which ſpread open* c; *and in one Species there are Five, and in the other Ten, ſlender Stamina, terminated by roundiſh Summits* d: *It has an acute-pointed Germen ſituated in the Center, having no Style, but is crowned by Three feathery Stigmas* e. *The Germen afterward turns to an oblong three-cornered acute-pointed Capſule* f, *with One Cell, opening with Three Valves, filled with ſmall Seeds crowned with a feathery Down.*

THIS Genus of Plants is ran[illegible] the Third Sectio[illegible] [illegible] which includes thoſe *Plants whoſe Flowers ha[illegible] Male and Three Female Parts. Tournefort* has it in the Appendix to his *Inſtitutions*; and Mr *Ray* places it among his Miſcellaneous Trees and Shrubs.

The Species here repreſented are,

Fig. 1. TAMARIX *floribus pentandriis, Hort. Cliff.* 111. Tamariſk with Five Male Parts to the Flower. This is the *Tamariſcus Narbonenſis, Lob. Icon.* 218. The *French* Tamariſk. *Caſpar Bauhin* titles it *Tamarix altera, folio tenuiore, ſive Gallia, Pin.* 485. The other Tamariſk with a narrower Leaf, or *French* Tamariſk.

This Tree grows naturally in the South of *France*, in *Spain*, and *Italy*, where it riſes to a middling Stature; but in *England*, it is rarely ſeen above Fourteen or Sixteen Feet high. The Bark of the Stem is rough, and of a dark brown Colour. The Branches come out on every Side, are ſlender, and generally decline: They have a ſmooth reddiſh Bark, and are garniſhed with very narrow Leaves, which are finely cut into many Segments. The Flowers are produced in cloſe taper Spikes, which come from the Side of the Branches toward their upper Part: They are very ſmall, of a whitiſh Colour, with a Bluſh of Red on the Inſide of their Petals, as is repreſented at *f*, *Fig.* 1. The Flower *i* is about the natural Size. That at *a* and *b* is magnified, to ſhew the Parts more diſtinct. The Flowers of this Species have but Five Stamina, which are terminated by roundiſh red Summits. The Flowers appear in *July*, and there is generally a Succeſſion of them on the ſame Plant till Autumn.

The Wood, Bark, and Leaves, of this Tree are uſed in Medicine.

Fig. 2. TAMARIX *floribus decandriis, Hort. Cliff.* 111. Tamariſk with Ten Male Parts in the Flower. This is the *Tamariſcus Germanica, Lob. Icon.* 218. German Tamariſk. *Caſpar Bauhin* titles it *Tamarix fruticoſa, folio craſſiore, ſive Germanica, Pin.* 485. Shrubby or *German* Tamariſk with a thicker Leaf.

This grows naturally in moiſt Places in *Germany*, and is rather a Shrub than a Tree. It generally riſes with many woody Stalks from the Root, which grow more erect than thoſe of the former. They have a ſmooth pale-green Bark when young, which afterward changes to a yellowiſh Colour. Theſe ſend out ſlender Side-branches, which grow erect, and are garniſhed with pale-green Leaves placed alternate: Theſe are ſhorter and cloſer than thoſe of the former; and the ſmall Leaves of which they are compoſed appear like Scales at a Diſtance, and lie over each other like thoſe of Fiſh. The Flowers terminate the Branches in long looſe Spikes: They are larger than thoſe of the former, and have Five ſpreading Petals of a Bluſh-colour; and within are Ten Stamina, Five of which are alternately longer than the other: Theſe adhere to the Baſe of the Petals, as is ſhewn at *d*, where they are magnified; the Figure *g* being the natural Size of the Flower. This Sort flowers at the ſame Time as the former.

PLATE CCLXIII.

TETRAGONIA, *Lin. Gen. Plant.* 551. *Tetragonocarpus, Com. Hort. Amſt.* 2. 205.

The Characters of the Genus are,

The Flower has a permanent Empalement, compoſed of Four oval coloured Leaves b, *ſitting upon the Germen: It has no Petal, unleſs the Empalement is ſo called: but has more than Twenty ſhort ſlender Stamina, crowned by oblong proſtrate Summits* c. *It has a roundiſh Germen ſituated under the Flower; ſupporting Four Awl-ſhaped recurved Styles* d, *which have hairy Stigmas of the ſame Length as the Styles. The Germen afterward turns to a four-cornered Capſule, with a thick ſucculent Cover, incloſing One hard four-cornered Seed.*

The

The Species here repreſented are,

Fig. 1. TETRAGONIA *foliis ovatis integerrimis, caule fruticoſo decumbente, Dict. Hort.* Tetragonia with oval intire Leaves, and a ſhrubby trailing Stalk.

THIS Plant grows naturally at the *Cape of Good Hope*. The Stalks are thick, and very ſucculent when young, but afterward become ligneous: They are as thick as a Man's little Finger; but, if they are not ſupported, they trail upon the Ground. The Leaves are oval, thick, and ſucculent: They are Two Inches long, and One broad; and are for the moſt Part placed oppoſite. Theſe, and alſo the young Branches, are covered with ſmall pellucid Drops. The Flowers come out from the Wings of the Stalk, each ſtanding upon a ſhort ſlender Footſtalk: There are Two, Three, or Four, of theſe riſing from the ſame Point. They have Four yellowiſh green Leaves, which ſome call the Empalement, and others the Petals: Theſe ſpread open, and within are ſituated a great Number of ſhort yellow Stamina, terminated by oblong proſtrate Summits, One of which is repreſented at *a*. The Flowers appear during moſt of the Summer Months, and are ſucceeded by thick fleſhy Capſules, having Four Corners or Wings, incloſing One hard Seed.

Fig. 2. TETRAGONIA *foliis linearibus, Flor. Leyd. Prod.* 250. Tetragonia with linear Leaves. This is the *Tetragonocarpos Africana, fruticans, foliis longis & anguſtis, Hort. Amſt.* 2. *p.* 205. Shrubby *African* Tetragonocarpos with long and narrow Leaves.

This is alſo a Native of the ſame Country with the former, but has been much longer in *Europe*. The Stalks of this are ſlender, and when young are ſucculent; but afterward become ligneous, and have a whitiſh Bark: Theſe divide into many Branches, which trail upon the Ground if they are not ſupported. They are garniſhed with narrow ſucculent Leaves, an Inch long, and Half a Quarter of an Inch broad: They are placed alternate, and have no Footſtalks; and are covered with pellucid Drops, like thoſe of the former Sort. The Flowers are produced from the Wings of the Stalks, towards the Top, and terminate the Stalks in looſe Spikes, ſtanding upon very ſhort Footſtalks. Their Structure and Colour are the ſame as thoſe of the former Sort, but are ſmaller; and are ſucceeded by Capſules of the ſame Form. This Plant flowers great Part of the Summer, and in warm Seaſons the Seeds will ripen in the Autumn.

PLATE CCLXIV.

TEUCRIUM, *Lin. Gen. Plant.* 625. *Chamædrys, Tourn. Inſt. R. H.* 204. *Tab.* 97. *Raii Meth.* 60. Germander; in French, *Germandrée.*

The Characters of the Genus are,

The Empalement of the Flower a *is of One Leaf, cut into Five equal acute Segments at the Top, and is permanent. The Flower is of One Petal, and of the Lip Kind* b. *The Tube is very ſhort. The lower Lip* c *is divided into Five Segments, the middle one being hollowed like a Spoon. It has Four Stamina, which occupy the Place of the upper Lip* d, *Two of which are longer than the other, terminated by ſmall Summits; and a four-pointed Germen, ſituated in the Empalement* b, *ſupporting a ſlender Style* e, e, *crowned by a ſlender Stigma* f. *The Germen afterward turns to Four Seeds* g, *which ripen in the Empalement.*

THIS Genus is ranged in the Firſt Section of *Linnæus*'s Fourteenth Claſs, which includes thoſe *Plants whoſe Flowers have Two long and Two ſhorter Stamina, and the Seeds ripen in the Empalement of the Flower. Tournefort*, who keeps theſe Plants under the Genus of *Chamædrys*, places it in the Fourth Section of his Fourth Claſs, which contains the *Herbs with a Flower of One Petal, having One Lip.* Mr. *Ray* places it in the Firſt Section of his Fourteenth Claſs, which includes the *Plants with whorled Flowers, which have perennial ligneous Stalks.*

The Species here repreſented are,

Fig. 1. TEUCRIUM *foliis multifidis, floribus verticillatis utrinque ternis, Lin. Sp. Plant.* 562. Germander with many pointed Leaves, and Flowers in Whorles, Three on each Side the Stalk. This is the *Chamædrys laciniatis foliis, Lob. Icon.* 385. Germander with cut Leaves. *Caſpar Bauhin* titles it *Botrys Chamædryoides, p.* 138. *Jeruſalem* Oak-like Germander.

The Title of this Plant on the Plate was, by Miſtake, tranſpoſed from another Figure, and printed off before it was obſerved by the Author; and he therefore hopes the Reader will alter it. This Plant grows naturally in the South of *France*, in *Italy*, and *Germany*, on arable Land: It is annual, and decays ſoon after it has perfected Seeds. The Stalks are four-cornered and hairy: They riſe a Foot high, and are garniſhed at every Joint by Two hairy Leaves placed oppoſite, which are cut into Three Segments almoſt to the Midrib, and theſe are ſlightly indented in Three Parts. The Flowers ſtand in Whorles round the Stalks, Three riſing together on each Side, ſtanding upon ſhort Footſtalks: They are of a pale Bluſh colour, and ſhaped like thoſe of the other Species. It flowers in *June* and *July*, and the Seeds ripen in the Autumn.

Fig. 2. TEUCRIUM *foliis ovatis, ſupernè ſerrato-dentatis, floribus racemoſis, Flor. Leyd. Prod* 307. Germander with oval Leaves pointed at both Ends, and indented like a Saw at their upper Part, and branching Flowers. This is the *Chamædrys multiflora, tenuifolia Hiſpanica, Tourn. Inſt. R. H.* 205. Many-flowering *Spaniſh* Germander with a narrow Leaf.

This grows naturally in *Spain*. It has perennial ligneous Stalks, which riſe a Foot high, and are erect, ſending out ſlender Branches from the Side. The Leaves are oval, and ſmooth on their upper Side, but hairy on their under, and end in ſharp Points: Their upper Part is ſawed. The Flowers come out in branching Whorles round the Stalks: They are of a bright red Colour, and appear in *June*, *July*, and *Auguſt*; and in warm Seaſons the Seeds will ripen well in *England*.

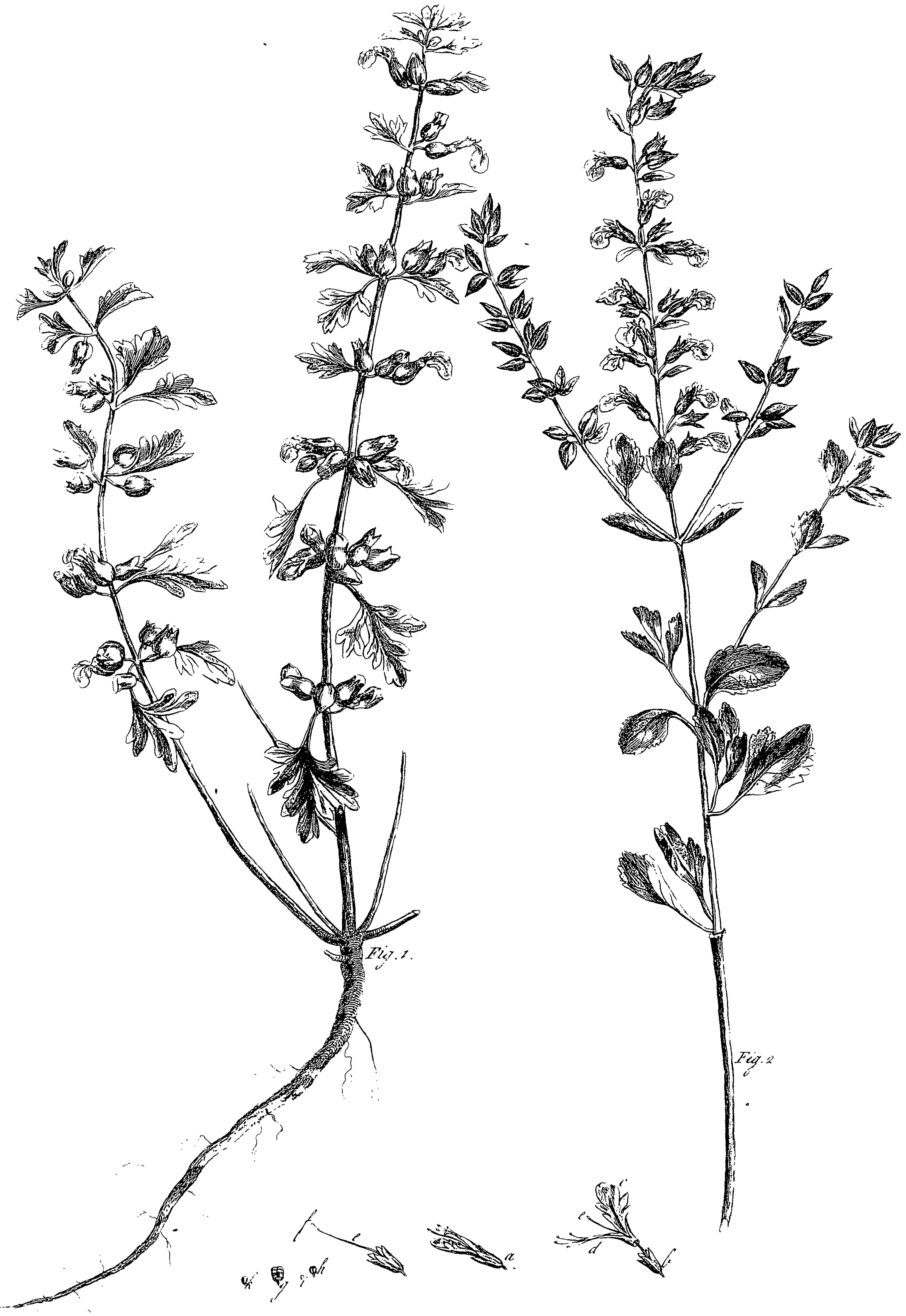


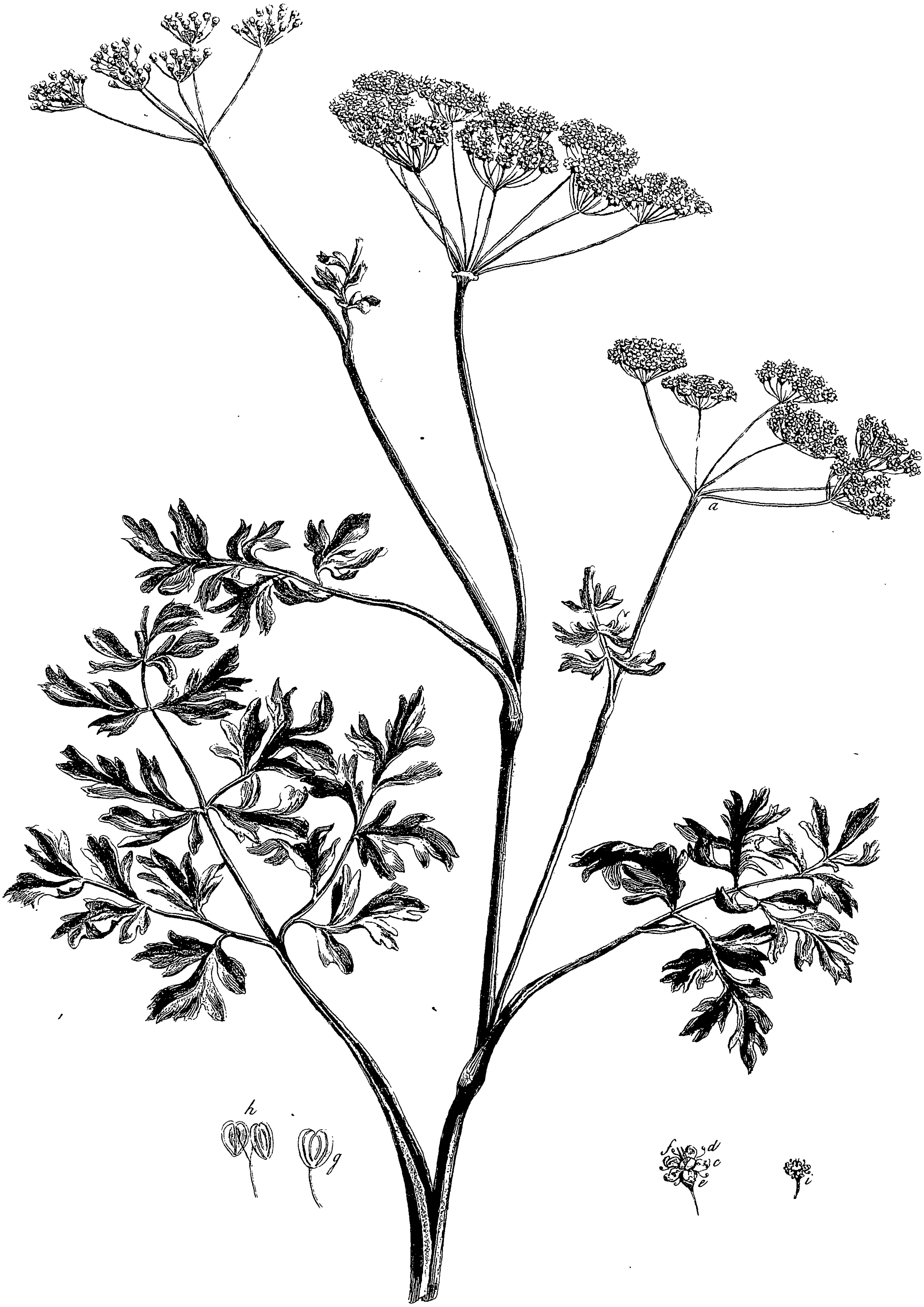
Fig. 1. TEUCRIUM *foliis ovatis inciſo-crenatis petiolatis, floribus ſubverticillatis. Lin. Hort. Cliff. 302.*

Fig. 2. TEUCRIUM *foliis ovatis utrinque acutis, ſuperne ſerrato-dentatis, floribus racemoſis Flor. Leyd. prod. 307.*

R. Lancake delin. *J. M[illegible]*

Publish'd according to Act of Parliament by P. Miller Octr. 26. 1758.

Pl. CCLXVI.



TORDYLIUM, *umbellulis remotis, foliis duplicato-pinnatis, pinnis incisis tomentoſis* Dict. Hort.

J. Miller delin et Sculp.

Published according to Act of Parliament by J. Miller November 23. 1758.

PLATE CCLXV.

Thalictrum, *Tourn. Inſt. R. H.* 270. *Tab.* 143. *Raii Meth. Plant.* 130. *Lin. Gen. Plant.* 617. Meadow Rue, or Feathered Columbine.

THIS Genus of Plants is ranged in the Sixth Section of *Tournefort*'s Sixth Claſs, which includes the *Herbs with a Roſe Flower, whoſe Pointal becomes a Fruit compoſed of ſeveral Capſules.* Dr. *Linnæus* places it in the Seventh Section of his Thirteenth Claſs, which contains the *Plants whoſe Flowers have many diſtinct Stamina, and ſeveral Styles.*

The Characters of this Genus are,

The Flower has no Empalement: It has Four roundiſh Petals a, *which are concave, and drop off ſoon* b, *and many Stamina* c, *which are broad, compreſſed, and longer than the Petals, terminated by oblong twin Summits, with ſeveral ſhort Styles, each ſitting upon a ſeparate Germen, and are crowned by thick Stigmas* d. *The Cover of the Germen afterward turns to a Keel-ſhaped furrowed Capſule* e, *having One Cell* f, *opening at the Top* g, *incloſing One oblong Seed* h.

The Plants of this Genus differ from each other in ſome of their Characters; for although moſt of the Species have but Four Petals to their Flowers, yet there are Two or Three which have Five: Others differ in the Number of their Stamina; and there is One or Two which have Male and Female Flowers in different Plants.

The Species here repreſented are,

Fig. 1. Thalictrum *fructibus pendulis triangularibus rectis, caule tereti, Lin. Sp. Plant.* 547. Meadow Rue with triangular pendulous Fruit, and a taper Stalk. This is the *Thalictrum majus ſtaminibus florum purpuraſcentibus, C. B. P.* 337. Greater Meadow Rue with purple Stamina to the Flowers. *Tournefort* titles it *Thalictrum Alpinum aquilegiæ foliis florum ſtaminibus purpuraſcentibus, Inſt. R. H.* 270. *Alpine* Meadow Rue with Columbine Leaves, and Flowers with purpliſh Stamina, commonly called *Feathered Columbine.*

This Plant grows naturally on the *Alps* and *Helvetian* Mountains; but has been long cultivated in the *Engliſh* Gardens, for Ornament; and has been generally known by the Title of *Feathered Columbine*, which was given it from the Reſemblance which the Leaves have to thoſe of Columbine; but as the Petals of the Flowers ſoon dropped off, and the numerous Stamina were left without Cover, ſo they called it *Feathered.*

There are Two Varieties of this (if not diſtinct Species), which are common in the Gardens; One of which has purple Stalks, and pale purpliſh Stamina to the Flowers, which is here repreſented; the other has green Stalks and whitiſh Stamina to the Flowers; but whether theſe are accidential Varieties, or diſtinct Species, I cannot determine.

The Root is compoſed of many fleſhy Fibres of a yellowiſh Colour. The lower Leaves are branched into ſeveral Diviſions, and have broad Lobes of a lucid green, reſembling thoſe of *Columbine.* The Stalk is taper, ſmooth, and of a beautiful purple Colour: It riſes about Three Feet high, branching out on the Side, and is terminated by a looſe Panicle of Flowers, which have each Four Petals; theſe ſoon fall off, leaving the numerous Stamina and Styles naked. Theſe Flowers appear in *June*, and are ſucceeded by thin Capſules, each containing a ſingle oblong Seed, which ripens in *Auguſt*; after which the Stalk dies to the Root, which is perennial, and ſends out new ones the Spring following.

Fig. 2. Thalictrum *floribus pentapetalis, radice tuberoſa, Hort. Cliff.* 227. Meadow Rue with Flowers having Five Petals, and a tuberous Root. This is the *Thalictrum minus aſphodeli radice, magno flore, Tourn. Inſt. R. H.* 271. Smaller Meadow Rue with an Aſphodel Root, and a large Flower. The Author of the *Hiſtoria Lugdunenſis* titles it *Oenanthe Myconi*, 763. Myconie's Water Dropwort.

This Plant grows naturally on the Mountains in *Spain.* The Root is compoſed of ſeveral fleſhy Fibres, like thoſe of the *Garden Ranunculus.* The Stalk is ſlender, and riſes about a Foot high, or ſomewhat more, in moiſt Ground: It ſends out One or Two Side Branches, and is garniſhed with Three or Four compound Leaves at the Joint, whoſe Lobes are moſt of them roundiſh, and indented at their Points; in Three Parts: They are of a light green Colour. The Stalks are terminated by ſmall Panicles of Flowers, which have each Five white Petals, repreſented at *a*: Theſe ſoon fall off; but within are a great Number of Stamina *b*, which are of a yellowiſh Colour; and between theſe are ſeveral ſhort Styles, crowned by obtuſe Stigmas *c*. Theſe Flowers appear in *June*, and are ſucceeded by thin Capſules, each incloſing One oblong Seed; which ripens in the Autumn.

PLATE CCLXVI.

Tordylium, *Tourn. Inſt. R. H.* 320. *Tab.* 170. *Raii Meth. Plant.* 47. *Lin. Gen. Plant.* 293. Hartwort.

THIS Genus of Plants is ranged in the Fifth Section of *Tournefort*'s Seventh Claſs, which includes the *Herbs with umbellated Flowers diſpoſed circularly, whoſe Empalement becomes Two large oval flat Seeds.* Mr. *Ray* places it in the Firſt Section of his Eleventh Claſs, which contains the *Plants with umbellated Flowers, having flat Seeds with Wings or Borders.* Dr. *Linnæus* ranges it in the Second Section of his Fifth Claſs, which includes *thoſe Plants whoſe Flowers have Five Stamina and Two Styles.*

The Characters of the Genus are,

It has an umbellated Flower: The general Umbel a *is compoſed of many ſmall ones* b, *which are called Rays: Neither of theſe have any Involucrum. The Flowers have Five inflexed Petals* c, *which are equal: They have each Five*

Hair-like Stamina d, *which are terminated by roundiſh Summits. They have a roundiſh Germen* e, *ſituated under the Flower, ſupporting Two ſlender Styles* f, *which are the Length of the Stamina, terminated by ſmall obtuſe Stigmas. The Germen afterward turns to a roundiſh compreſſed Fruit* g, *dividing into Two Parts* h, *each containing One compreſſed bordered Seed.*

This Plant grows naturally about *Aleppo*, where it is called by the *Arabians*, *Secacul*. This is eaten crude by the Inhabitants of *Aleppo*. It is an annual Plant, whoſe Roots decay ſoon after the Seeds are ripened. The lower Leaves are doubly winged: Each Leaf is compoſed of Four Pair of ſimple-winged Leaves, which have generally Seven Lobes, ſtanding ſometimes alternate, and at others by Pairs, terminated by an odd one: Theſe are deeply jagged on their Edges, and are of a yellowiſh-green Colour, and a little hairy. The Stalk is taper and ſmooth: It riſes from Two to Three Feet high, ſending out Two or Three Side Branches, and is garniſhed with One compound Leaf at each Joint, whoſe Baſe almoſt embraces the Stalk; theſe are of the ſame Shape and Colour with thoſe at Bottom, but are ſmaller. Each Stalk is terminated by a compound Umbel of yellow Flowers: Thoſe on the principal Stalk are compoſed of Nine or Ten ſmall Umbels, or Rays; but thoſe on the Side Branches have ſeldom more than Five or Six. Each of the Rays ſuſtains Five, Six, or Seven Flowers, ſtanding upon ſhort ſlender Footſtalks: Theſe are compoſed of Five oblong incurved yellow Petals, and Five Stamina, which ſpread open, and lie between the Petals. They have each Two ſlender Styles ariſing from the Germen, which is ſituated under the Flower, and, after the Flower is paſt, turns to an oval compreſſed Fruit, ſplitting in Two Parts, each containing One oval flat bordered Seed. It flowers in *June*, and the Seeds ripen in *Auguſt*.

PLATE CCLXVII.

TRIFOLIUM, *Tourn. Inſt. R. H.* 404. *Tab.* 228. *Raii Meth. Plant.* 107. *Lin. Gen. Plant.* 802. Trefoil, or Clover; in *French*, *Trefle*.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort*'s Tenth Claſs, which includes the *Herbs with a Butterfly Flower, having Leaves compoſed of Three Lobes*. Mr. *Ray* places it in the Second Section of his Twenty firſt Claſs, which contains the *Leguminous Plants with trifoliate Leaves, which do not climb*. Dr. *Linnæus* ranges it in the Third Section of his Seventeenth Claſs, which includes the *Plants whoſe Flowers have Ten Stamina joined in Two Bodies*.

The Characters of the Genus are,

The Flower has a tubulous permanent Empalement of One Leaf, divided into Two Lips a: *The upper Lip is cut into Three acute Segments, and the under into Two. The Flower is of the Butterfly Kind. The Standard* b *is large, and reflexed. The Keel is divided into Three Points* c; *which in ſome Species are obtuſe, and in others acute. The Wings* d *are intire, and ſhorter than the Standard; but are longer than the Keel. It has Ten Stamina* e; *Nine of which are joined* f, *and One is ſeparated* g: *Theſe are terminated by ſingle Summits; and an oval Germen, ſupporting a ſingle Style* h, *crowned by a ſingle Stigma. The Germen afterward becomes a ſhort Pod, with One Valve, incloſing Two or Three roundiſh Seeds.*

The Species here repreſented are,

Fig. 1. TRIFOLIUM *capitulis villoſis globoſis, calycibus ſuperioribus floſculo deſtitutis, Hort. Cliff.* 374. Trefoil with hairy globular Heads, and the upper Empalements deſtitute of Flowers. This is the *Trifolium globoſum repens, C. B. P.* 329. Trailing globular Trefoil. *John Bauhin* titles it *Trifolium glomerulis perſonatæ Cherleri, Hiſt.* 2. *p.* 377. Glomerated Trefoil of Cherler.

This Plant grows naturally in the South of *France*, in *Spain* and *Italy*. The Root is annual. The Stalks trail upon the Ground, and extend a Foot or more in Length, according to the Goodneſs of the Soil in which they grow. Theſe are garniſhed with Leaves compoſed of Three oval Lobes, whoſe Baſes join to the Top of the Footſtalks. The Flowers ſtand upon pretty long ſlender Footſtalks, which ſpring from the Wings of the Stalk. They are collected into round Heads, lying over each other like the Scales of Fiſh, each having their Empalements cut into Five acute Segments: They are ſmall, and of a bright red Colour. The Flowers on the right are repreſented in their natural Size; but that on the Left is magnified. The Flowers appear in *July*, and the Seeds ripen in *September*.

Fig. 2. TRIFOLIUM *ſpicis oblongis villoſis obtuſis aphyllis, foliolis ſubrotundis, Flor. Leyd. Prod.* 380. Trefoil with oblong obtuſe hairy Spikes without Leaves, and the Lobes of the Leaves roundiſh. This is the *Trifolium ſpica oblonga rubra, C. B. P.* 328. Trefoil with an oblong red Spike.

This Sort grows naturally in the South of *France*, and in *Spain*. The Root is annual. The Stalks riſe near Two Feet high: They are garniſhed with trifoliate Leaves, whoſe Lobes are roundiſh, ſtanding upon long Footſtalks, and are ſawed at their Points. The Flowers are produced in long hairy obtuſe Spikes, which terminate the Stalks: They are of a bright red Colour, ſo make a fine Appearance. Theſe Flowers appear in *July* and *Auguſt*; and the Seeds ripen in the Autumn. This Plant will make good Food for Cattle; but as it is an Annual, ſo it will not ſuit with the common Practice of the Farmers, who ſow their Clover and Trefoil with *Rye Graſs*, for a Two Years Crop. But if this is ſown ſeparate, it will yield a good Crop the Firſt Year, and appear very beautiful in the Field.

PLATE CCLXVIII.

TURNERA, *Plum. Nov. Gen. Plant.* 15. *Tab.* 12. *Lin. Gen. Plant.* 338.

THE Title of this Genus was given it by Father *Plumier*, who found One Species growing naturally in the *French* Iſlands in the *Weſt Indies*, in Honour to the Memory of Dr. *William Turner*, a very learned *Engliſh* Phyſician, who publiſhed a Hiſtory of Plants in *Engliſh*, in the Year 1551, with the Figures for the moſt Part copied from *Fuchſius*'s Hiſtory.

This Genus of Plants is ranged in the Third Section of *Linnæus*'s Fifth Claſs, which includes thoſe *Plants whoſe Flowers have Five Male and Three Female Parts.*

The Characters of the Genus are,

The Flower has a Funnel-ſhaped Empalement of One Leaf a, *which is cut into Five Parts at the Brim*; *but has Two oblong Leaves, One on each Side, which terminate in Points. The Flower has Five Heart-ſhaped plain Petals* b, *which have narrow Tails, and are inſerted to the Empalement. It has Five Awl-ſhaped Stamina* c, *which are ſhorter than the Petals, and are inſerted to the Empalement* d, *and terminated by acute-pointed Summits* e. *It has a conical Germen, ſupporting Three ſlender Styles* f, *which are crowned by Stigmas ending in many Points. The Germen afterward turns to an oval Capſule, with One Cell* g, *which opens at the Top with Three Valves, incloſing ſeveral oblong Seeds* h.

The Species here repreſented are,

Fig. 1. TURNERA *foliis lineari-lanceolatis hirſutis, obtuſe ſerratis acuminatis, Dict. Hort.* Turnera with narrow Spear-ſhaped hairy Leaves, which are bluntly indented and end in acute Points. This is the *Turnera lycopi folio, Rand. Hort. Chelſ.* Turnera with a Water Horehound Leaf. Sir *Hans Sloane*, in his Hiſtory of *Jamaica*, titles this Plant *Ciſtus urticæ folio, flore luteo, vaſculis trigonis*, Vol. I. p 202. Ciſtus with a Nettle Leaf, a yellow Flower, and a three-cornered Capſule.

This Plant grows naturally in many of the Iſlands in the *Weſt Indies*, from whence the Seeds were ſent to *Europe*. It riſes with a woody Stalk to the Height of Eight or Ten Feet, covered with a dark brown Bark; and ſends out Barnches one very Side, the whole Length: Theſe are garniſhed with narrow Spear-ſhaped hairy Leaves, about Three Inches long, and Three Quarters of an Inch broad in the Middle, drawing to a Point at both Ends: They are bluntly ſawed on their Edges, have very ſhort Footſtalks, and, when rubbed, emit a diſagreeable Odour. The Flowers are faſtened to the Footſtalks of the Leaves, to which they ſit very cloſe, and have Two leafy Appendages to their Empalements: They are compoſed of Five large Heart-ſhaped Petals of a pale yellow Colour, whoſe Baſes are narrow, and are inſerted to the Empalement: They ſpread open, as is repreſented in the Figure. When the Flowers fall off, the conical Germen ſwells to a three-cornered Capſule, ſitting between the Two leafy Appendages; and when the Seeds are ripe, it opens in Three Valves at the Top, and diſcharges the Seeds. It flowers great Part of the Year; and the Seeds ripen all the Summer.

Fig. 2. TURNERA *foliis ovato-lanceolatis, ſerratis rugoſis, Dict. Hort.* Turnera with oval Spear-ſhaped Leaves, which are rough and ſawed on their Edges. This is the *Turnera fruteſcens ulmifolia, Plum. Gen. Nov.* 15. Shrubby Turnera with an Elm Leaf.

This has a ſhrubby Stalk like the Firſt, and riſes to the ſame Height: It is alſo branched on every Side from the Ground upward; but the Branches are ſlender and ſtiff. The Leaves are oval Spear-ſhaped: They are Two Inches and a Half long, and almoſt Two broad in the Mindle, having ſeveral deep Furrows; and are rough on their upper Side, of a lucid green Colour, but are pale on their under: They are ſawed on their Edges; and have longer Footſtalks than thoſe of the former Sort. The Flowers are very like thoſe of the former, and ſit cloſe on the Footſtalk of the Leaf. The Segments of their Empalements are broader than thoſe of the Firſt Sort, as is ſhewn at *m*; but, in other Reſpects, the Two Sorts are ſo like, as that many Botaniſts have ſuppoſed they were the ſame Species. But the Differences before-mentioned are conſtant from Seeds, ſo there can be no doubt of their being diſtinct Species.

PLATE CCLXIX.

CRATÆGUS, *Tourn. Inſt. R. H.* 633. *Pyrus, Lin. Gen. Plant.* 550. Wild Service; in *French, Miſier.*

THE Genus of *Cratægus* is ranged in the Eighth Section of *Tournefort*'s Twenty-firſt Claſs, which includes the *Trees and Shrubs with a Roſe Flower, whoſe Empalement turns to a Fruit pregnant with hard Seeds*; and he diſtinguiſhes it from the *Pear*, *Apple*, and *Quince*, by the hard Seeds which are lodged in the Cells; and from the Service, by its having ſingle intire Leaves. Dr. *Linnæus* ſeparates the *Cratægus* from the *Meſpilus* and *Sorbus*, by the Number of Styles; ranging thoſe which have Two Stamina under *Cratægus*, thoſe with Three under *Sorbus*, and ſuch as have Five he places under *Meſpilus*; but, according to his Syſtem, the Plant here repreſented ſhould be placed under the Genus *Pyrus*. But as the late Dr. *Amman*, Profeſſor of Botany at *Peterſburgh*, has ranged it under *Cratægus*, ſo I have followed him, though the Characters do not agree well with thoſe of either Genus.

The Characters of *Cratægus*, according to *Linnæus*, are,

The Flower has an Empalement of One Leaf a, *which is concave, and cut into Five Segments at the Top, and is permanent: It has Five roundiſh concave Petals* b, *which are inſerted in the Empalement, and Twenty Awl-ſhaped Stamina* c, *which are inſerted to the Empalement, terminated by roundiſh Summits. The Germen, which is ſituated under the Flower, ſupports Two ſlender Styles (in this there are Five)* d, *crowned by erect-headed Summits. The Germen afterward becomes a roundiſh fleſhy umbilicated Fruit* e, *with Two oblong hard Seeds (in this there are Five)* f, *lodged in ſo many diſtinct Cells.*

The Species here repreſented is,

CRATÆGUS *ceraſi folio, floribus magnis, Amman. Ruth.* 274. Wild Service with a Cherry Leaf, and large Flowers.

This Tree grows naturally in *Siberia*, from whence the Seeds were ſent to *Peterſburgh*, by the following Title, *Malus Daurica montana magno flore albo, fructu ceraſi exiguo, luteo ex rubro variegato, auſtero, petiolo prælongo tenui. i. e.* Mountain Apple of *Dauria* with a large white Flower, a ſmall Fruit like a Cherry, of a yellow and red Colour variegated, having an auſtere Taſte; and a long ſlender Footſtalk.

It has a ſtrong woody Stem, ſending out many Side Branches, covered with a ſmooth brown Bark. The Leaves are ſhaped like thoſe of the Cherry-Tree: They are of a deep green on their upper Side, but are paler on their under; and are ſlightly ſawed on their Edges, ſtanding upon long Footſtalks. The Flowers come out in Bunches from the Side of the Branches, ſtanding upon long ſlender Footſtalks: They are compoſed of Five oval white Petals, in Shape like thoſe of the *Pear-Tree*, which are inſerted in the Empalement; and have a great Number of Stamina, about Half the Length of the Petals, terminated by roundiſh yellow Summits; and Five Styles riſing in the Center, which are as long as the Petals, crowned with headed Summits. Theſe Flowers appear in *April*, at the ſame Time as thoſe of the *Pear-Tree*; and are ſucceeded by roundiſh Fruit, about the Size of large *Duke Cherries*, which change to a yellowiſh Colour variegated with red, indented at both Ends like an *Apple*; but of a very auſtere Taſte; decaying like the Fruit of *Medlar*, and is then more palatable; having Five hard Seeds lodged in diſtinct Cells. This Plant has been by ſome intituled *Ceraſo-Mali*, and by others *Malo-Ceraſi*, from the Reſemblance which the Fruit has to both. But it is certainly much nearer a-kin to the *Apple*, than any of the other Genera, though the Flowers are more like thoſe of the Pear-Tree.

As the laſt Summer this Tree produced its Fruit in the *Chelſea* Garden, for the Firſt time, ſo many of the Subſcribers to this Work deſired a Figure of it might be exhibited therein, though it was not inſerted in the Order which we firſt propoſed.

PLATE CCLXX.

RHUS, *Lin. Gen. Plant.* 331. *Cotinus, Tourn. Inſt. R. H.* 610. *Tab.* 380. *Raii Meth. Plant.* 158. *Venice* Sumach; in *French, Fuſtet.*

THIS Shrub is by Dr. *Linnæus* placed in his Genus of *Rhus*; but, by former Botaniſts, it has been kept in a ſeparate Genus. It is ranged in the Third Section of *Linnæus*'s Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and Three Styles. *Tournefort* places it in the Firſt Section of his Twenty-firſt Claſs, which contains the Trees and Shrubs with a Roſe Flower, whoſe Pointal turns to a Fruit with One Capſule. Mr. *Ray* places it among his miſcellaneous Trees and Shrubs.

The Characters are,

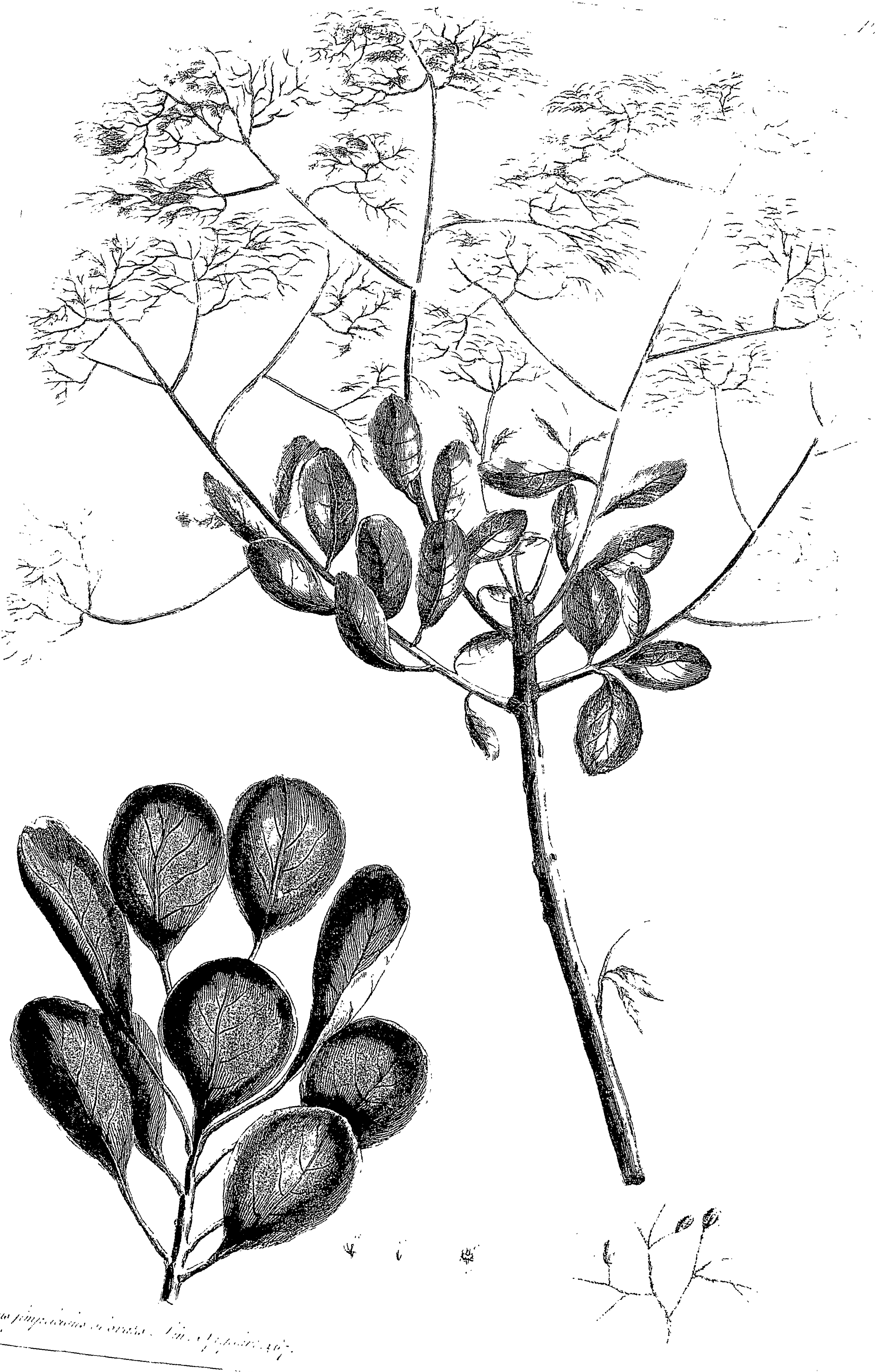
The Flower has a permanent Empalement, divided into Five Parts a: *It has Five Petals, which ſpread open* c; *and Five ſhort Stamina, crowned by ſmall Summits. It has a roundiſh Germen* d, *having ſcarce any Style, terminated by Three ſmall Stigmas. The Germen afterward turns to an oval Berry* g, g g. *The Fruit ſtands ſingle upon hairy Branches* f, f, *and incloſes One hard Seed* b.

The Species here repreſented is,

RHUS *foliis ſimplicibus obovatis, Lin. Sp. Plant.* 267. Sumach with ſingle oval Leaves. This is the *Cotinus Coriaria, Dod. Pempt.* 780. *Venice* Sumach. *John Bauhin* titles it *Coccigria ſive Cotinus putata, Hiſt.* 1. *p.* 487. Coccigria or Sumach.

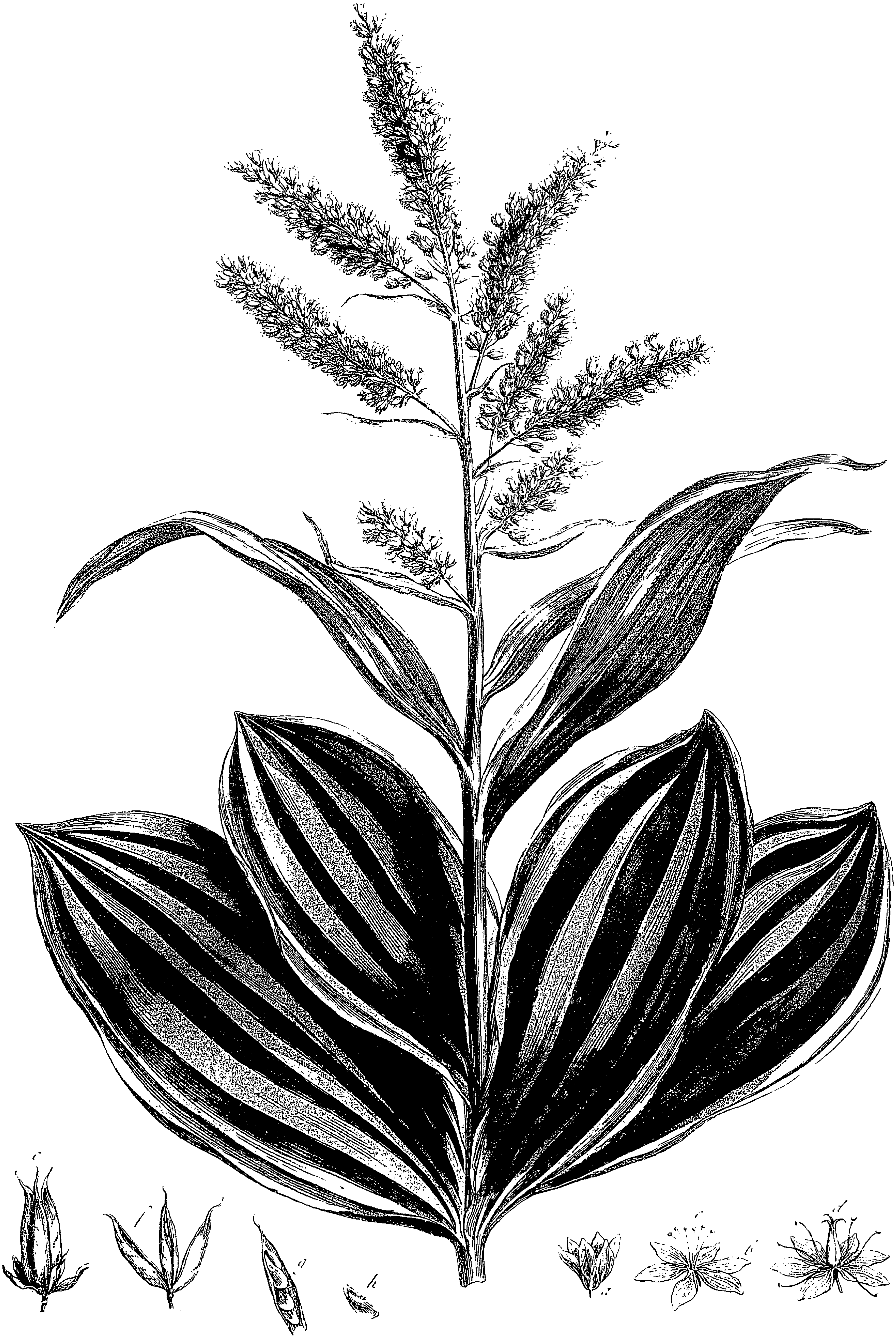
This Shrub grows naturally in the South of *France*, and in *Italy*; but has been long cultivated in the *Engliſh* Gardens for Variety. It has a woody Stem, which riſes Ten or Twelve Feet high, covered with a light brown Bark, ſending out many irregular Branches, which have a purpliſh Bark; and are garniſhed with roundiſh oval Leaves of a light green Colour, which are intire. The Flowers are produced upon feathery Branches, which come from the Ends of the Shoots of the ſame Year: Theſe Branches are of a ruſſet brown Colour, and frequently ſpread over the whole Shrub, making a ſingular Appearance. The Flowers are very ſmall, and grow ſparſedly on the Branches: Theſe appear in *July*; but are ſeldom ſucceeded by Seeds in *England*.

The Wood of this Shrub is uſed for dyeing a yellow Colour. The Leaves and young Branches dye black; and the Bark is uſed for tanning of Leather.



US foliis simplicibus obovatis. Lin. Sp. plant. 267.

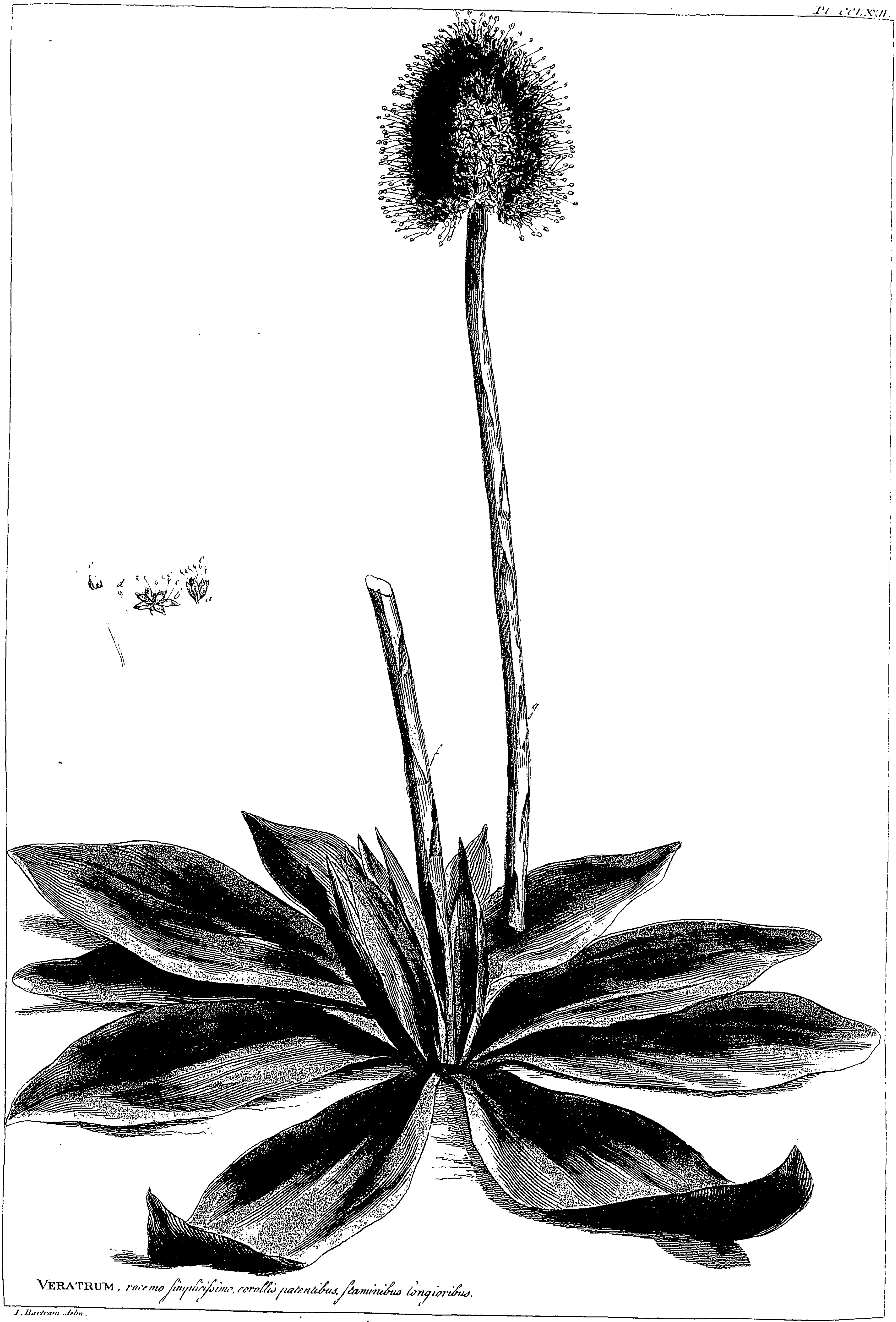
Pl. CCLXXI.



VERATRUM, *racemo supradecompoſito, corollis erectis. Lin. sp. plant 1044.*

J. Miller delin et Sculp

Publish'd according to Act of Parliament by P. Miller Dec.r 22. 1758



VERATRUM, *racemo ſimpliciſsimo, corollis patentibus, ſtaminibus longioribus.*

J. Bartram delin.

J. Miller Sculp.

Publish'd according to Act of Parliament by P. Miller. December 22. 1758.

PLATE CCLXXI.

VERATRUM, *Tourn. Inſt. R. H.* 272. *Tab.* 145. *Lin. Gen. Plant.* 1013. *Helleborus albus, Raii Meth. Plant.* 77. White Hellebore; in *French, Ellebore blanc.*

The Characters of the Genus are,

It has Hermaphrodite and Male Flowers intermixed in the ſame Spike. The Flowers have no Empalement, according to ſome Syſtems, or no Petals, according to others. They have Six oblong Spear-ſhaped Petals a, *which are permanent. The Male Flowers* b *have Six Awl-ſhaped Stamina, which ſpread aſunder, and are terminated by quadrangular Summits, as is repreſented at* c. *Theſe have no Germen; but have a withered Style. The Hermaphrodite Flowers have the ſame Number of Petals and Stamina as the Male, and have Three oblong Germina ſitting upon the Style, which is ſcarce viſible, crowned by a trifid ſpreading Stigma* d. *The Germina afterward turn to Three oblong erect compreſſed Capſules* e, *which open on the Inſide* f, *having but One Cell* g, *which includes ſeveral compreſſed Seeds* h.

THIS Genus of Plants is ranged in the Sixth Section of *Tournefort*'s Sixth Claſs, which includes the *Herbs with a Roſe-ſhaped Flower, whoſe Pointal turns to a Fruit compoſed of ſeveral Capſules.* Dr. *Linnæus* places it in the Firſt Section of his Twenty-third Claſs, which contains thoſe Plants, *whoſe Flowers are of different Sexes in the ſame Plant.* Mr. *Ray* ranges it in the Firſt Section of his Eighteenth Claſs, which includes the *Plants with a regular Flower, ſucceeded by ſeveral Capſules.*

The Species here repreſented is,

VERATRUM *racemo ſupra decompoſito, corollis erectis, Lin. Sp. Plant.* 1044. Veratrum, whoſe Spikes are decompounded above, and the Petals of the Flower erect. This is the *Veratrum flore ſubviridi, Tourn. Inſt. R. H.* 273. White Hellebore, with an almoſt green Flower. *Caſpar Baubin* titles it *Helleborus albus, flore ſubviridi, Pin.* 186. White Hellebore with a green Flower.

This Plant grows naturally on the Mountains of *Auſtria, Helvetia,* and *Greece.* The Root is perennial, and compoſed of many fleſhy Fibres, gathered into a Head at the Top, which ſtrike deep in the Ground. The Leaves are of an oblong oval Form, they are Ten Inches long, and Five broad in the Middle, ending in roundiſh Points, having ſeveral longitudinal Plaits, like thoſe of *Gentian.* The Stalks riſe from Three to Four Feet high, the lower Part being garniſhed with Leaves of the ſame Form with thoſe below; but are ſmaller. The upper Part branches out in ſeveral cloſe Spikes of greeniſh Flowers, as is repreſented in the Figure; under each of theſe is ſituated a very narrow pointed ſmall Leaf, which is plaited. The Flowers are compoſed of Six Petals, which do not ſpread open flat. They are of a whitiſh green Colour, and have Six Stamina, which ſpread aſunder, terminated by four-cornered yellow Summits. The Hermaphrodite Flowers have Three oblong Germina, which, after the Flower is paſſed, turn to Three compreſſed Capſules, containing One Row of flat Seeds.

This Plant flowers in *June* and *July*; the Seeds ripen in Autumn. It is this Sort which is uſed in Medicine. The Root purges violently upward and downward; for which Reaſon it is ſeldom preſcribed, but in Madneſs, or to Perſons of robuſt Conſtitutions. The Powder of it, mixed with Snuff, is a ſtrong Sternutatory.

PLATE CCLXXII.

VERATRUM, *Tourn. Inſt.* 272. *Lin. Gen.* 1013. White Hellebore.

THE Characters of this Genus having been deſcribed above, we ſhall not repeat them here.

The Species here repreſented is,

VERATRUM *racemo ſimpliciſſimo, corollis patentibus, ſtaminibus longioribus.* White Hellebore, with a ſingle Spike of Flowers, whoſe Petals ſpread open, and longer Stamina. This is titled by Mr. *John Bartram*, who diſcovered the Plant growing naturally in *North America, Veratrum ſempervirens*; i. e. Evergreen White Hellebore.

It has a perennial Root, compoſed of many fleſhy Fibres, from which ſpring out ſeveral oblong oval Leaves of a light green Colour, which ſpread near the Ground, and ſit cloſe to the Root at their Baſe. They are from Four to Five Inches long, and from Two to Three Inches broad in the Middle, leſſening at both Ends, where they are blunt-pointed. They have Six longitudinal Veins, which appear ſtrongeſt on their Under-ſide. Theſe continue green all the Year. In the Centre of the Leaves ariſes a ſingle naked Stalk, about a Foot high, as is repreſented in the Figure *f* and *g*, which is terminated by a cloſe conical Spike of purple or dark red Flowers, compoſed of Six Petals, which ſpread open flat, as is repreſented at *c*. Theſe have each Six Stamina, which are twice the Length of the Petals, repreſented in the Two Flowers *a* and *c*, terminated by oval Summits. They have no Style; but the Germen is crowned by a trifid Stigma. Some of the Flowers have no Stigma. Theſe are barren, having no Capſule ſucceeding them. Others are hermaphrodite, and are ſucceeded by an oval Capſule, repreſented at *d*, which has Three ſeparate Cells, each containing ſeveral compreſſed Seeds.

This Plant, on the Firſt Examination, appeared to belong to *Linnæus*'s Sixth Claſs, having Six Stamina in each Flower, and the Three Germina, which ſeemed joined in One Capſule, which is three-cornered, has the Reſemblance to the Fruit of that Claſs; but, on nearer Inſpection, there were found many male Flowers intermixed with the hermaphrodite Flowers in the ſame

Spike, which were not ſucceeded by Seed Veſſels; and as this is the principal Character given by Dr. *Linnæus*, to diſtinguiſh this Genus from thoſe which approach near it, therefore it is here properly referred to its Claſs, according to its Syſtem.

I was firſt favoured with a Plant of this Sort by Mr. *Peter Collinſon*, F. R. S. and afterwards received a Plant, with a Drawing of it, made in the Country where it naturally grows, by Mr. *John Bartram* junior; and have ſince been furniſhed with more Plants by Dr. *Benſel* of *German Town* in *Philadelphia*, who found it growing plentifully in ſhady moiſt Places.

PLATE CCLXXIII.

VERBASCUM, *Tourn. Inſt. R. H.* 146. *Tab.* 61. *Raii Meth. Plant.* 85. *Lin. Gen. Plant.* 217. Mullein; in *French*, *Bouillon blanc.*

The Characters of the Genus are,

The Flower has a ſmall permanent Empalement a, *of One Leaf, cut into Five Segments at the Top. It has One Wheel-ſhaped Petal* b, *having a ſhort cylindrical Tube, which is cut into Five large obtuſe Segments, ſpread open flat. It has Five Awl-ſhaped Stamina* c, *which are ſhorter than the Petals, terminated by roundiſh erect compreſſed Summits; and a roundiſh Germen, ſupporting an inclining Style* e, *crowned by a thick obtuſe Stigma* d. *The Germen afterward turns to an oval Capſule* g, *having Two Cells, which open at the Top* h, *filled with angular Seeds* i, *which are faſtened to the Placenta.*

THIS Genus of Plants is ranged in the Sixth Section of *Tournefort*'s Second Claſs, which includes the *Herbs with a Wheel-ſhaped Flower of One Petal, whoſe Pointal turns to a dry Fruit.* Mr. *Ray* places it in the Third Section of his Nineteenth Claſs, which contains thoſe Plants which have *uniform Flowers of One Petal, cut into Five Parts to the Bottom, and the Seeds are included in a Capſule with Two Cells.* Dr. *Linnæus* ranges it in the Firſt Section of his Fifth Claſs, which includes thoſe Plants *whoſe Flowers have Five Stamina and One Style.*

The Species here repreſented is,

VERBASCUM *foliis radicalibus ovatis petiolatis, caulinis oblongis ſeſſilibus ſubtus tomentoſis ſerratis, Dict. Hort.* Mullein with oval lower Leaves upon Footſtalks; thoſe upon the Stalks oblong, ſitting cloſe, downy on their Under ſide, and ſawed on their Edges. This is the *Verbaſcum blattariæ foliis nigrum, amplioribus foliis aluteis, apicibus purpuraſcentibus, Boerh. Ind. alt.* 1. *p.* 228. Mullein with a black Moth Mullein Leaf, large yellow Petals to the Flower, and purple Stamina.

The Seeds of this Plant were given me by the late Dr. *Boerhaave*, Profeſſor of Botany at *Leyden*, who informed me that he had received them from *Vienna*. The lower Leaves of this Plant are oval. They are about a Foot long, and Six Inches broad in the Middle, ending in round obtuſe Points ſtanding upon Footſtalks, of a ſoft downy Texture, their Upper-ſide being of a green Colour, and their Under-ſide downy, and of a hoary White, having ſome ſtrong longitudinal Veins. The Stalk riſes from Three to Four Feet high. The lower Part is garniſhed with oblong Leaves of the ſame Texture with thoſe below, but ſit cloſe to the Stalks. They are longer, and end in Points; in which they differ from the lower Leaves. The Flowers are diſpoſed in a looſe Spike on the upper Part of the Stalk, having one very narrow Leaf under each. The Flowers are of a brimſtone Colour, and are larger than thoſe of the common Mullein. They have One Petal, which is cut into Five roundiſh obtuſe Segments almoſt to the Bottom. The Stamina are hairy, and of a purple Colour. The Flowers have an agreeable Scent at a ſmall Diſtance; but if ſmelt to long or too near, it becomes leſs pleaſant.

They appear in *June* and *July*, and the Seeds ripen in the Autumn; and then the Plant decays, being biennial.

PLATE

PLATE CCLXXIV.

Viburnum, *Lin. Gen. Plant.* 332. *Tinus, Tourn. Inſt. R. H.* 607. *Tab.* 377. *Laurus tinus, Raii Meth. Plant.* 147. Laurus tinus; in *French, Laurier-tin.*

The Characters of the Genus are,

The Flower has a ſmall permanent Empalement a, *which is deeply cut into Five Segments. It has One open Bell-ſhaped Petal, which is cut into Five obtuſe Segments at the Brim* b. *It has Five Awl-ſhaped Stamina* c, *terminated by roundiſh Summits* d, *and a roundiſh Germen ſituated under the Flower, having no Style; but its Place is occupied by a roundiſh Gland, crowned by Three obtuſe Stigmas. The Germen afterward turns to a roundiſh Fruit with One Cell, incloſing One hard roundiſh Seed* g.

THIS Genus is ranged in the Third Section of *Linnæus*'s Fifth Claſs, which includes thoſe *Plants whoſe Flowers have Five male and Three female Parts*; and, under this Title, he brings the *Tinus* and *Opulus* of *Tournefort*, including them in the ſame Genus. *Tournefort* places the Three Genera in the Sixth Section of his Twentieth Claſs, which contains the *Trees and Shrubs with a Flower of One Petal, whoſe Empalement becomes a Berry.* Mr. *Ray* places it among the *Trees with an umbilicated Berry, having One Seed.*

The Species here repreſented is,

Viburnum *foliis ovato-lanceolatis integerrimis ſubtus venoſis, Dict. Hort.* Way-faring Tree with oval Spear-ſhaped intire Leaves veined on their Under-ſides. This is the *Viburnum foliis integerrimis lanceolato-ovatis, Lin. Sp. Plant.* 268. Way-faring Tree with intire Spear-ſhaped oval Leaves. In the *Flora Virginiana*, it is titled *Tinus foliis ovatis in petiolos terminatis integerrimis, p.* 33. Tinus with oval intire Leaves terminating in a Footſtalk.

This Shrub is a Native of *North America*, from whence it has been brought to *England*, where it is cultivated in many curious Gardens. It has a ſtrong Stalk, covered with a brown ſmooth Bark, which riſes to the Height of Ten or Twelve Feet, ſending out ligneous Branches on every Side the whole Length, which have a ſmooth purpliſh Bark, and are garniſhed with oval Spear-ſhaped intire Leaves placed oppoſite upon Footſtalks. They are Five Inches long, Two Inches and a Half broad, ſmooth on their Upper-ſide, and of a lucid Green. Their Under ſides are veined, and of a light Green. Their Edges are intire, and both Ends are rounded. They are of the ſame Thickneſs with thoſe of the broad-leaved *Laurus tinus.* The Flowers are produced in large Umbels at the End of the Branches, as is repreſented in the Figure. They are in Shape and Colour like thoſe of the common *Laurus tinus*, but are ſmaller, and the Stamina are much larger than the Petal. The ſingle Flowers at the Bottom of the Plate are magnified; as are alſo the Fruit; to ſhew them to more Advantage.

The Flowers appear in *July*, and are ſucceeded by roundiſh Berries, which, when ripe, are black; but theſe do rarely ripen in *England.*

There ſeem to be Two Species, or Varieties, of this Plant; one of which grows in the Northern Parts of *Virginia* and *Maryland*, which caſts its Leaves in Winter. The other grows naturally in *Carolina*, and is an Evergreen.

PLATE CCLXXV.

Vitex, *Tourn. Inſt. R. H.* 603. *Tab.* 372. *Lin. Gen. Plant.* 708. *Raii Meth. Plant.* 158. The Chaſte Tree.

The Characters of the Genus are,

The Empalement of the Flower a *is ſhort, cylindrical, and indented in Five Parts. The Flower has One ringent Petal* b, *having a ſhort cylindrical Tube. The Brim is plain and divided into Two Lips, which are each cut into Three Segments, the middle One being the broadeſt. It has Four ſlender Stamina, which are a little longer than the Tube; Two of which are ſhorter than the other, terminated by moveable Summits, and a roundiſh Germen* d, *ſupporting a ſlender Style* e, *crowned by Two Awl-ſhaped ſpreading Stigmas* f. *The Germen afterward turns to a globular Berry, with Four Cells, each containing One oval Seed.*

THIS Genus is ranged in the Fourth Section of *Tournefort*'s Twentieth Claſs, which includes the *Trees and Shrubs with a Flower of One Petal, whoſe Pointal becomes a Fruit with ſeveral Cells.* Dr. *Linnæus* places it in the Second Section of his Fourteenth Claſs, which contains thoſe *Plants whoſe Flowers have Two long and Two ſhorter Stamina, and their Seeds are included in Capſules.* Mr. *Ray* places it among his miſcellaneous Trees and Shrubs.

The Species here repreſented are,

Fig. 1. Vitex *foliis ternatis quinatiſque pinnato-inciſis, ſpicis verticillatis terminalibus, floribus cæruleis.* Chaſte Tree with trifoliate and quinate Leaves, which are cut like winged Leaves, and whorled Spikes of blue Flowers terminating the Branches. This Shrub grows naturally in *China*, from whence the Seeds were ſent to *Paris* by the Miſſionaries, and the Plants were raiſed in the Garden of his Highneſs the Duke *D'Ayen* at *St. Germain's*, who was ſo good as to ſend me the Plants of Two Sorts. This has a low ſhrubby Stalk, ſending out weak ligneous Branches on every Side, which riſe about Three Feet high, covered with a greyiſh brown ſmooth Bark, and are garniſhed with Leaves placed oppoſite upon pretty long Footſtalks. Some of theſe are compoſed of Three, others have Five Spear-ſhaped Lobes, ſpreading like the Fingers of a Hand, ending in acute Points. Theſe are regularly cut on their Edges in Form of winged Leaves. The largeſt of theſe Lobes are about One Inch and a Half long, and Three Quarters of an Inch broad in the Middle. They are of a dull green on their Upper-ſide, and are grey on their Under. The Branches are terminated by Spikes of Flowers, which are Three or Four Inches long. The Flowers are diſpoſed in Whorles round the Stalks. They are of a blue Colour, and are divided into Two Lips, the upper Lip being much broader than the lower. They are both cut into Three Segments, the middle One being the largeſt. The Firſt Flower, marked *a*, *b*, is of the natural Size; the others are magnified, and *g* is One of the Stamina, *h* the Summit magnified.

Fig. 2. VITEX *foliis ternatis quinatiſque pinnato inciſis, verticillatis terminalibus, floribus albis.* Chaſte Tree with trifoliate and quinquefoliate Leaves cut in Form of winged Leaves, and whorled Spikes of white Flowers terminating the Branches.

This ſeems to be only a Variety of the former Sort, from which it only differs in the Colour of the Flowers. There is alſo another Variety with red Flowers.

PLATE CCLXXVI.

WATSONIA.

The Title of this Genus is given to it in Honour of my learned Friend Dr. *William Watſon*, F. R. S. whoſe Knowledge of Natural Hiſtory, and particularly in the Science of Botany, juſtly demands this Tribute.

The Characters of the Genus are,

The Flower has a permanent Spatha, or Sheath a, *which divides longitudinally into Two Parts almoſt to the Bottom. It has One Petal, which has a long curved Tube ſwelling toward the Top. The Rim is cut into Six obtuſe Segments* b, *which ſpread open. It has Three ſlender Stamina* c, *which are terminated by oblong proſtrate Summits, and a roundiſh three-cornered Germen* e, *ſupporting a long ſlender Style* f, *crowned by Three bifid Stigmas* d. *The Germen afterwards turns to a roundiſh three cornered Capſule, incloſed in the Spatha* g, *having Three Cells, each containing Three or Four roundiſh Seeds.*

THIS Genus belongs to the firſt Section of *Linnæus*'s Third Claſs, the Flower having Three male Parts and one female. It differs from *Gladiolus*, in having a tubulous Flower of One Petal; and from *Crinum*, in having but One Stamen.

As we know but One Species of this Genus, ſo it requires no ſpecific Epithets.

WATSONIA.

In the former Edition of the *Gardener's Dictionary*, it has the following Title: *Watſonia foliis enſiformibus, floribus alternis.* Watſonia with Sword-ſhaped Leaves and alternate Flowers. This has been ſince titled by Dr. *Trew*, *Meriana flore rubello.* Meriana with a reddiſh Flower. But he was not then acquainted with the Title which I had given to it; ſo he has ſince informed me by Letter, that, as I had raiſed the Plant from Seeds, he would ſuppreſs his Title, and adopt mine, as he thought I had the beſt Right to name it; and he the rather chuſes ſo to do, becauſe his Figure was drawn from the Plant in the *Chelſea Garden*, and he had not ſeen the Plant growing.

This Plant has a compreſſed bulbous Kidney ſhaped Root, marked *i*, which is covered with a fibrous brown Skin, from which ſpring out ſeveral Sword-ſhaped Leaves about a Foot long, and One Inch broad, whoſe Edges are thin; but in the Middle, where the Midrib runs, they are thicker, and the Rib is prominent on both Sides. Theſe embrace each other at their Baſe, and end in acute Points. They are of a deep green, reſembling thoſe of the *Iris*. The Stalk comes out between the Leaves. It riſes a Foot and Half high, and the lower Part of it is garniſhed with One Leaf at each Joint, of the ſame Shape and Colour as thoſe below, but are ſmall, and embrace the Stalk with their Baſe. The Flowers are produced on the upper Part of the Stalk, coming out alternately from the Sides, each having a Sheath or Cover, which ſplits open longitudinally, for the Flower to advance. Theſe Covers are of the ſame Colour with the Leaves before the Flower appears, but afterwards they wither and become dry. The Tube of the Flower is an Inch and an Half long, narrow at the Baſe, but enlarges upward, where it is a little curved. The Top is cut into Six obtuſe Segments, which ſpread open. The Flower is of a copper red Colour on the Outſide, but of a brighter red within. They have each Three Stamina, which are a little longer than the Tube, and are terminated by oblong proſtrate Summits of a brown Colour; and from the Germen, which is ſituated at the Bottom of the Tube, ariſes a Style which is longer than the Petal, and is crowned by Three bifid Stigmas. The Flowers of this Plant appear in *April* or *May*, and are ſucceeded by roundiſh three-cornered Capſules, which are cloſely wrapped by the withered Sheaths. They have Three Cells, in each of which there are lodged Three or Four roundiſh Seeds, which ripen in *July*.

This Plant grows naturally at the *Cape of Good Hope*. The Seeds were ſent me, with thoſe of ſeveral other curious Plants, by my learned Friend Dr. *Job Baſter*, F. R. S. of *Zirkzee*.

Pl. CCLXXVIII.

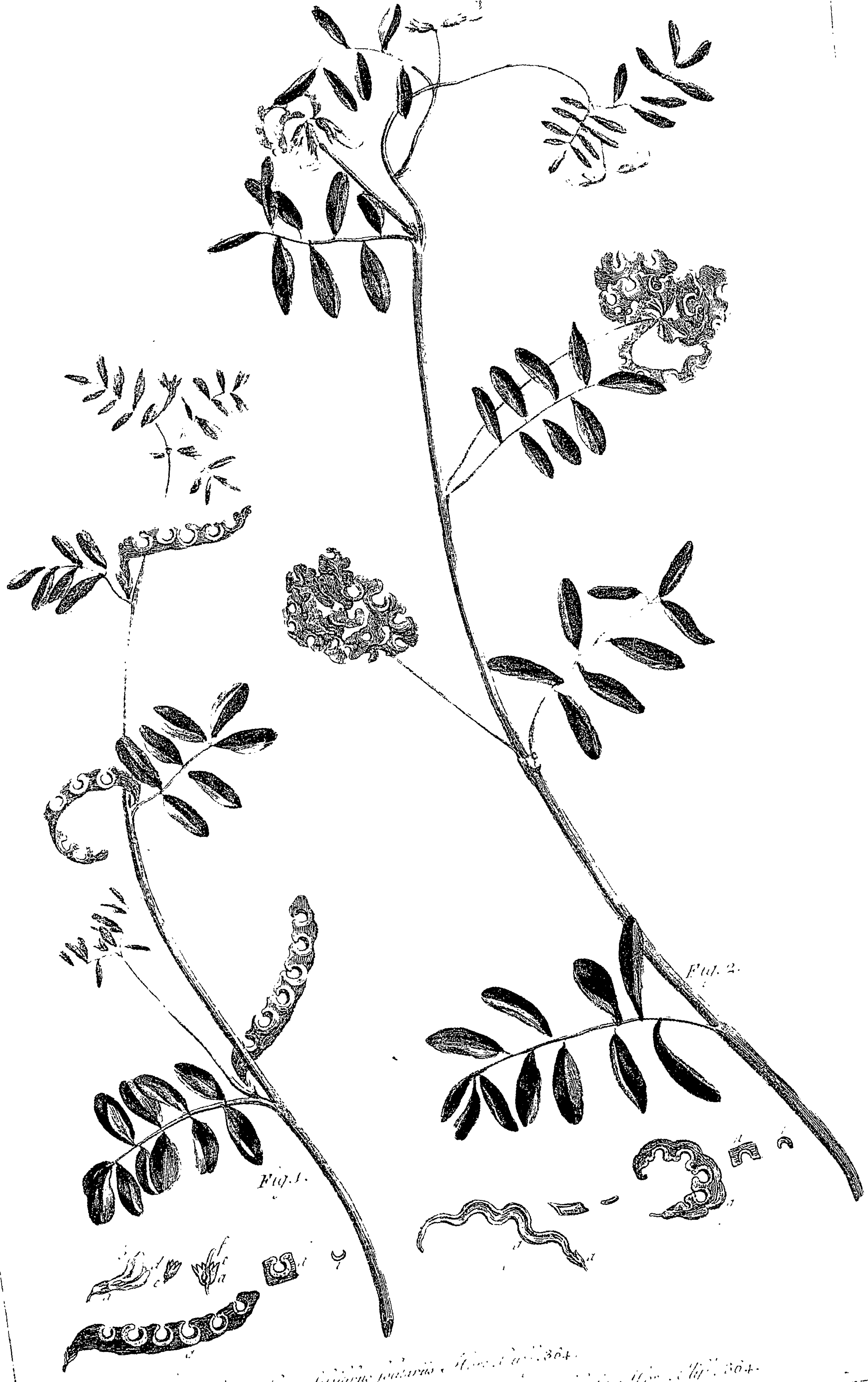


Fig. 1. HIPPOCREPIS, leguminibus sessilibus solitariis. Hort. Cliff. 364.

Fig. 2. HIPPOCREPIS, leguminibus pedunculatis confertis margine exteriore lobatis. Hort. Cliff. 364.

R. Lancake delin.

J. Miller sc.

Publish'd according to Act of Parliament by P. Miller January 26. 1758.

PLATE CCLXXVII.

VERBASCUM, *Tourn. Inſt. R. H.* 147. *Raii Meth. Plant.* 85. *Lin. Gen. Plant.* 217. Mullein; in *French*, *Bouillon blanc.*

THE diſtinguiſhing Characters of this Genus having been exhibited in the former Number of this Work, we ſhall not repeat them here.

The Species here repreſented is,

VERBASCUM *foliis lanatis radicalibus, ſcapo nudo, Lin. Sp. Plant.* 179. Mullein, with downy Leaves near the Root, and a naked Stalk. This is the *Verbaſcum humile, Alpinum, villoſum, Borraginis folio & flore, Tourn. Inſt. R. H.* 147. Low Hairy Mullein of the *Alps*, with a Leaf and Flower like Borrage. *Caſpar Bauhin* titles it, *Sanicula Alpina, foliis Borraginis villoſa, Pin.* 243. Alpine Sanicle, with hairy Borrage Leaves: And *John Bauhin* calls it, *Auricula Urſi Myconi piloſa, cærulea, Hiſt.* 3. *App.* 869. Hairy Blue Bear's-ear of *Myconi*; commonly called, *Bear's-ear Sanicle.*

This Plant grows naturally upon the *Alps* and *Pyrenean* Mountains. The Root is fibrous and perennial: The Leaves ſpread flat on the Surface of the Ground, and are but few in Number. They are of a thick fleſhy Subſtance, of an oval Shape, indented on their Edges, and hairy, as is repreſented at *f*. They are rough, and of a dark green Colour, having ſcarce any Footſtalk; but embrace the Crown of the Root, and lie over each other. Theſe continue in Verdure all the Year; but in the Winter they change to a much darker green than they are in the Summer.

Between theſe Leaves ariſe ſeveral naked Footſtalks, about Four Inches high, which divide into Three or Four ſmaller Footſtalks towards the Top. They are hairy, and of a brown purpliſh Colour. Each of theſe ſmaller Diviſions is terminated by a ſingle Flower, compoſed of One Petal of a fine blue Colour, which is deeply cut into Five Segments, ſo as to have the Appearance of a Flower with Five Petals; but as the Segments are connected at their Baſe, and fall off without dividing, they are termed One Petal, according to *Tournefort* and *Ray*. The Segments of the Petal are oval, and end in obtuſe Points, as at *b*. They ſpread open flat, like thoſe of the Auricula; and in the Center is ſituated a ſingle Style, repreſented at *d*, which ſits upon an oval Germen, included in a one-leaved Empalement, *a*; which is Funnel-ſhaped, and cut into Five obtuſe Segments at the Top. Round the Style there are ſituated Five Stamina, which are erect, and have flat Summits, which are connected to the Stigma, as is ſhewn at *c*. The Flowers of this Plant appear in *May*; and are ſucceeded by oval Capſules filled with ſmall Seeds, as at *e*, which ripen in *Auguſt*.

PLATE CCLXXVIII.

HIPPOCREPIS, *Lin. Gen. Plant.* 791. *Ferrum Equinum, Tourn. Inſt. R.H.* 400. *Tab.* 225. *Raii Meth. Plant.* 106. Horſe-ſhoe Vetch; in *French*, *Fer de Cheval.*

The Characters of this Genus are,

The Flower has a permanent Empalement of One Leaf, cut into Five Parts, as is ſhewn at a; *the Two upper being joined. The Flower* b *is of the Butterfly kind. The Standard* b *is Heart-ſhaped at the Point: but is narrow at the Baſe. The Wings* d *are oval, oblong, and blunt. The Keel* c *is compreſſed, and Moon ſhaped. It has Ten ſlender Stamina; Nine of which are united in One Body, and the Tenth ſtands ſeparate. In the Center is ſituated an oblong narrow Germen* f, *ſitting upon an awl-ſhaped Style* e, *crowned by a ſingle Stigma. The Germen afterwards turns to a long plain compreſſed Pod* g, *which is divided into ſeveral Parts* h, *from the under Seam to the upper; each Part forming a roundiſh Sinus, with obtuſe Joints, connected to the upper Seam; each Joint being ſhaped like a Horſe-ſhoe* i, *incloſing a ſingle Seed.*

THIS Genus of Plants is ranged in the Third Section of *Linnæus*'s Seventeenth Claſs, which includes the Plants *with a Butterfly Flower, having Ten Stamina in each; Nine of which are joined in One Body, and the other ſtands ſeparate. Tournefort* places it in the Third Section of his Tenth Claſs, which contains the *Herbs with a Butterfly Flower, whoſe Pointal turns to a jointed Pod.* Mr. *Ray* ranges it in the Third Section of his Twenty-firſt Claſs, which includes the *leguminous Herbs with a Butterfly Flower, which are not trifoliate, and have jointed Pods.*

The Species here repreſented are,

Fig. 1. HIPPOCREPIS *leguminibus ſeſſilibus ſolitariis, Hort. Cliff.* 364. Horſe-ſhoe Vetch, with ſingle Pods ſitting cloſe to the Stalks. This is the *Ferrum Equinum ſiliquâ ſingulari, C. B. P.* 349. Horſe-ſhoe Vetch with a ſingle Pod. *Fabius Columna* titles it, *Ferrum Equinum vulgare, p.* 1. 300. Common Horſe-ſhoe Vetch. And *John Bauhin* calls it, *Solea Equina, Hiſt.* 2. 347.

This Sort grows naturally in *Italy*, *Spain*, and the *South of France*. It is an annual Plant, with ſeveral trailing Stalks about a Foot long, which divide towards their Top into a few ſmall Branches. They are garniſhed with winged Leaves, compoſed of Four or Five Pair of oblong Lobes, terminated by an odd one. They are obtuſe, and ſlightly indented at their Points. From the Wings of the Stalk are produced ſingly ſmall yellow Flowers of the Butterfly kind, which make no great Figure; but are ſucceeded by compreſſed Pods about Two Inches long, and a Third of an Inch broad, a little bending inward in Form of a Sickle, divided into many Joints; each being ſhaped like a Horſe-ſhoe, and incloſing a ſingle Seed of the ſame Form. The Flowers appear in *June* and *July*, and the Seeds ripen in the Autumn.

FIG. 2. HIPPOCREPIS, *leguminibus pedunculatis confertis, margine altero lobatis, Hort. Cliff.* 364. Horſe-ſhoe Vetch, with cluſtered Pods upon Footſtalks, whoſe outer Border is divided into Lobes. This is the *Ferrum Equinum ſiliqua multiplici, C. B. P.* 394. Horſe-ſhoe Vetch, with many Pods. *Fabius Columna* titles it *Ferrum Equinum alterum, polyceraton, p.* 1. 300. Another Horſe-ſhoe Vetch, with many Pods.

This is alſo an annual Plant, which grows naturally in the South of *France*, in *Germany*, and *Italy*. It hath trailing Stalks like the former, to which the whole Plant has great Reſemblance; but the Flowers of this are produced upon long Footſtalks, which ariſe from the Wings of the Leaves. They are ſmall, of a yellow Colour, and many of them are cluſtered together. Theſe are ſucceeded by narrower Pods than thoſe of the former Sort, which are more incurved, and their outer Border is divided into Lobes, as is repreſented at g, the inner Border being hollowed in Shape of Horſe-ſhoes. This flowers and ripens its Seeds about the ſame Time with the former.

PLATE CCLXXIX.

XERANTHEMUM, *Tourn. Inſt. R. H.* 499. *Tab.* 284. *Raii Meth. Plant.* 36. *Lin. Gen. Plant.* 851. Eternal or Immortal Flower.

The Characters of the Genus are,

The Flower is compoſed of Hermaphrodite and Female Florets, which are included in One common ſcaly Empalement a. *The Hermaphrodite Florets, which form the Diſk, are funnel ſhaped, and are cut into Five Points* c. *The Female Florets, which compoſe the Border or Rays* e *and* f, *are tubulous, and cut into Five leſs equal Parts. The Hermaphrodite Florets have Five ſhort Stamina* d, *terminated by cylindrical Summits, and a ſhort Germen ſupporting a ſlender Style, crowned by a bifid Stigma. The Germen afterwards turns to an oblong Seed crowned with a hairy Down, which ripens in the Empalement. The Female Florets have no Stamina; but their Germen, Style, and Seeds, are the ſame as the Hermaphrodite Florets.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Fourteenth Claſs, which includes the *Herbs with a radiated Flower, whoſe Diſk is compoſed of plain Petals.* Mr. *Ray* places it in the Firſt Section of his Eighth Claſs, which contains the *Herbs with a radiated corymbiferous Flower.* Dr. *Linnæus* ranges it in the Second Section of his Nineteenth Claſs, which includes thoſe Plants *whoſe Flowers are compoſed of Hermaphrodite and Female Florets, which are both fruitful.*

The Species here repreſented is,

XERANTHEMUM *foliis lanceolatis patentibus, Lin. Sp. Plant.* 857. Eternal Flower, with ſpear-ſhaped ſpreading Leaves. This is the *Xeranthemum flore pleno purpureo, majore, H. L.* Eternal Flower, with a larger double purple Flower. It is by *Cluſius* and *Dodoneus* titled, *Ptarmica Auſtriaca.* And by *Caſpar Bauhin* it is called *Jacea oleæ folio, capitulis ſimplicibus, Pin.* 272. Knapweed, with an Olive Leaf and ſingle Heads.

This Plant grows naturally in *Auſtria*, *Bohemia*, and in ſome Parts of *Italy*; but in its natural State the Flowers are ſingle: The double Flowers have been obtained by Culture. There are Two Varieties of this Species; one with white, and the other with purple Flowers; and both with ſingle and double Flowers. This Difference in the Colour of the Flowers is conſtant, where there is Care taken to ſave their Seeds ſeparate.

It is an annual Plant. The Stalk is ſlender, ſtiff, and branching. It is covered with a white Down, and is channelled the whole Length. It riſes about Two Feet high, and is garniſhed with ſpear-ſhaped Leaves an Inch and Half long, and One-third of an Inch broad in the Middle, drawing to a Point at each End. They are hoary, and ſit cloſe to the Stalk with their Baſe, having no Footſtalks. They are diſpoſed ſingly, and at a Diſtance from each other. The Branches or Diviſions of the Stalk are alſo garniſhed toward their Bottom with ſmaller Leaves of the ſame Shape; but their upper Part is naked, and each is terminated by One Flower, compoſed of the Hermaphrodite Florets in the Middle or Diſk; and the Border or Rays are made up of Female Florets. Theſe lie over each other in the double Flowers, like the Scales of Fiſh, and are very dry; ſo will continue freſh to Appearance, and retain their Colour many Months after they are ſeparated from the Plants. All theſe Florets are contained in one common ſcaley Empalement of a ſilvery Colour, and very dry. Theſe Florets of both Sexes are ſucceeded by one oblong Seed, which ripen in the Empalement; each Seed being ſeparated by ſcaley Chaff.

This Plant flowers in *June*, *July*, *Auguſt*, and *September*; and ſome Years will continue much longer, if the Seaſon proves favourable; but eſpecially thoſe Plants which ariſe from Seeds ſown in the Spring. Theſe do frequently continue till the Froſt or Wet of the Autumn deſtroy them. The Seeds ripen in about Six Weeks after the Flowers decay; ſo that thoſe Flowers only which appear by the Middle of *Auguſt*, or ſooner, will be early enough to perfect their Seeds.

Theſe Flowers were formerly much more cultivated in the Gardens near *London* than at preſent; and were brought to the Markets in great Plenty during the Winter Seaſon, to adorn Rooms. The Gardeners had a Method of ſtaining them of a deep red and blue Colour, by dipping them into different Liquids: So they brought them to the Markets in Bunches of four different Colours; white, purple, blue, and red: And when their Stalks were put into Glaſſes with Sand, the Flowers would continue in Beauty till the Spring.

PLATE CCLXXX.

FERRARIA, *Burman. Flos Indicus. Ferr. Flor. Cult.* 170.

The Characters are,

It has a double keel-ſhaped Spatha (or Sheath) a, *which ſurrounds the Flower-bud, and is membranaceous alternate; each incloſing a ſingle Flower. The inner is ſhorter, and ſtands oblique to the outer. The Flower has Six oblong acute pointed Petals; Three larger, and Three alternately ſmaller, whoſe middle Parts are raiſed and ſwelling. Their hinder Parts are ſmooth and lucid in the Middle; but their Tails are joined and contracted. Their Borders are fringed, ſilky, and reflexed. It has a roundiſh three-cornered Germen, ſituated under the Flower* b, *with Three Stamina* c, *which riſe above the Petals, and have roundiſh twin Summits ſituated below the Diviſion of the Stamina. The Style is erect, and crowned with a trifid hairy Stigma* d, *whoſe ſingle Parts are bifid and hairy. The Germen afterwards becomes an oblong ſmooth Capſule, preſſed together at Bottom, bellied above, and three-cornered, having Three Cells, which open in Three Valves, filled with very ſmall roundiſh Seeds* e, *faſtened to the middle Axis.*

THIS Plant muſt be placed in the Firſt Section of *Linnæus*'s Third Claſs, which includes thoſe Plants whoſe Flowers have Three Stamina and One Style.

The Species here repreſented is,

FERRARIA *foliis lanceolatis, Burman. Tab.* Ferraria with ſpear-ſhaped Leaves. This is the *Flos Indicus e violaceo fuſcus, radice tuberoſa, Ferr. Flor. Cult.* 170. Indian Flower of a tawney violet Colour, and a tuberous Root. It has alſo been ſtiled, by ſome of the old Botaniſts, *Flos Tygridis,* Tyger Flower.

This Plant grows naturally at the *Cape of Good Hope.* The Root was ſent me by Dr. *Job Baſter* of *Zirkzee,* with ſome other Sorts which he had received from the *Cape of Good Hope.* The Root is tuberous, roundiſh, and compreſſed *h,* in Shape like that of the *Indian Cornflag;* but is larger: And in the Center of the Upper-ſide of the Root there is a Hollow like a Navel, from whence comes out the Stalk. The outer Skin (or Cover) is of a light brown Colour; the Inſide is white. The Stalk riſes a Foot and a Half High. It is taper, and about the Thickneſs of a Man's little Finger, garniſhed with ſpear-ſhaped Leaves the whole Length, which are placed alternate, and embrace the Stalks with their Baſe. The lower Leaves are from Four to Five Inches long, and One Inch and a Half broad toward their Baſe, ending in obtuſe Points. They are a little keel-ſhaped, and of a light green Colour. The upper Part of the Stalk is garniſhed with Flowers, which ſpring from the Wings of the Stalk ſingly, and are wrapped up in a double Sheath, out of which the Flower-bud riſes about an Inch. The Sheath is compoſed of a double Row of keel-ſhaped Leaves; the inner Row being ſhorter than the outer, and are ſituated oblique to them. The Flower is compoſed of Six Petals, Three of which are alternately larger than the other. Theſe ſpread open, and their Borders are fringed, and reflexed backward. Their Inſide is of a pale ſky-blue Colour, and their Outſide of a dirty White. They have Three yellow Stamina with twin Summits, ſituated below the Diviſion of the Stamina, and are terminated by ſmall ſilky Hairs. In the Center is ſituated a bellied Germen, having Three obtuſe Angles ſupporting a taper Style, crowned by bifid Stigmas. The Germen afterwards becomes a three-cornered Capſule with Three narrow Cells, which are filled with very ſmall roundiſh Seeds faſtened to the middle Axis. It flowers in *April*; but the Seeds do not ripen here.

There is a great Singularity in the Root of this Plant: For it does not vegetate annually, as moſt others do; but, on the contrary, lies inactive every other Year; and ſometimes it will remain Two Years without putting out either Leaves or Fibres; and during that Time it will be perfectly ſound and fair.

The Root which I received put out Leaves the firſt Winter, and flouriſhed very well; but after theſe Leaves were decayed, it remained Two Years inactive: And the Third Year it ſhot up its Flower-ſtem in *November*, and flowered the following Spring.

PLATE CCLXXXI.

CLETHRA, *Flor. Virg. Lin. Gen. Plant.* 489. We have no *Engliſh* Title for this Genus.

The Characters are,

The Empalement of the Flower is permanent, of One Leaf, cut into Five Parts at the Top a. *The Flower has Five oblong Petals* b, *which are much longer than the Empalement. It has Ten Stamina* c, *which are of equal Length with the Petals, and are terminated by oblong erect Summits. In the Center is ſituated a roundiſh Germen ſupporting a permanent erect Style* d *and* e, *crowned by a trifid Stigma* f. *The Germen afterwards becomes a roundiſh Capſule* h *and* i, *incloſed in the Empalement, having Three Cells, which are filled with ſmall angular Seeds* i.

THIS Genus of Plants is ranged in the Firſt Section of *Linnæus*'s Tenth Claſs, which includes thoſe Plants whoſe Flowers have Ten Stamina and One Style.

There is but One Species of this Genus at preſent known.

CLETHRA, *Flor. Virg.* 47. The Clethra. This is titled by Dr. *Plukenet, Alnifolia Americana ſerrata, floribus pentapetalis albis in ſpicam diſpoſitis, Almag.* 18. American Shrub with a ſawed Alder Leaf, and white Flowers diſpoſed in a Spike, which have Six Petals.

This Shrub grows naturally in moſt parts of *North America*, by the Sides of Rivers, and in other moiſt

Places; where it riſes to the Height of Eight or Ten Feet; but in *England* it rarely riſes to more than half that Height. The Roots of this ſpread far on every Side, and ſend up many Stems, which are covered with a greyiſh Bark, and divide into ſmall Branches. Theſe are garniſhed with ſpear-ſhaped Leaves about Three Inches long, and an Inch and a Quarter broad in the Middle, drawing to a Point at each End. They are ſawed on their Edges, are of a deep green on their upper Side, and of a whitiſh green on their under; ſtanding upon very ſhort Footſtalks, and are placed alternate on their Branches. The Flowers are produced from the Wings and at the Extremity of the Branches, diſpoſed in long Spikes. They are compoſed of Five oblong white Petals, which ſpread open at the Top, each having an Empalement of One Leaf, cut at the Brim into Five Segments, which are permanent, and cover the Capſule after the Flowers are fallen. Within the Petals are ſituated Ten Stamina, which are of equal Length with the Petals, and ſpread aſunder every Way. Theſe are terminated by oblong Summits. In the Center of the Flower is ſituated a roundiſh Germen ſupporting a taper Style, crowned by a trifid Stigma. The Flower, *b*, *c*, and *d*, is a little magnified, to ſhew the Parts more diſtinct; as is alſo the Germen with the Style at *h*; and the Capſule with the Seeds *l*, *m*, and *n*; but *i* and *k* are of the natural Size.

This Shrub flowers in *July* and *Auguſt*; and in mild Seaſons they frequently produce ſome Spikes of Flowers in *October*.

PLATE CCLXXII.

ASTER, *Tourn. Inſt. R. H.* 481. *Tab.* 278. *Raii Meth. Plant.* 33. *Lin. Gen. Plant.* 858. Starwort.

THIS Genus of Plants is ranged in the Firſt Section of *Tournefort's* Fourteenth Claſs, which includes the *Herbs and Under-ſhrubs with a radiated Flower, and Seeds crowned with Down.* Mr. *Ray* places it in the Firſt Section of his Seventh Claſs, which contains the *Herbs with a diſcous radiated Flower, and downy Seeds.* Dr. *Linnæus* ranges it in the Second Section of his Nineteenth Claſs, which includes the *Plants whoſe Flowers are compoſed of Hermaphrodite and Female Florets.*

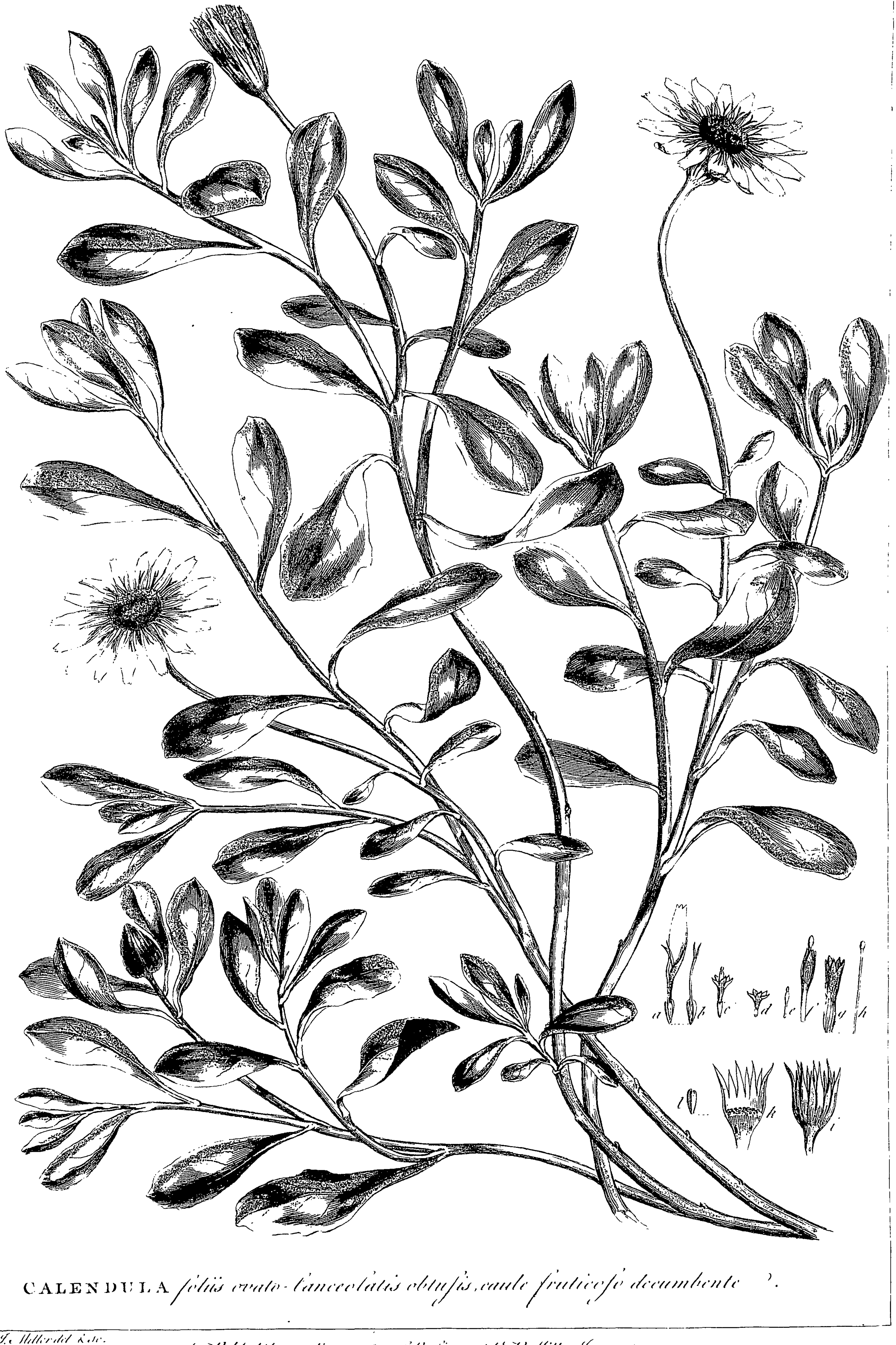
The Species here repreſented is,

ASTER *caule corymboſo, foliis lanceolatis reflexis, floribus ſolitariis, calycibus patulis. Flor. Leyd. Prod.* 168. Starwort with a corymbous Stalk, reflexed ſpear-ſhaped Leaves, ſolitary Flowers, and ſpreading Scales to the Empalement. This is the *Aſter Virginianus pyramidatus, Hyſſopi foliis aſperis, ſquamis calycis foliaceis, Act. Reg. Lond. Martyn. Cent. Tab.* 19. Virginia pyramidal Starwort with rough Hyſſop Leaves, and leafy Scales to the Empalement. Dr. *Dillenius* has titled it, *Aſter grandiflorus aſper, ſquamis reflexis, Hort. Elth.* 41. *Tab.* 36. Large flowering rough Starwort with reflexed Scales. And Dr. *Gronovius*, in the *Flora Virginica*, titles it, *Aſter foliis lanceolatis ſemiamplexicaulibus crenatis ſcabris, ramis unifloris folioſis*, 99. Starwort with ſpear-ſhaped Leaves, which are rough, crenated, and half embrace the Stalks; and leafy Branches with One Flower.

This Plant grows naturally in *Virginia*, from whence it was brought by the late Mr. *Mark Cateſby*, about the Year 1720, and given to Mr. *Fairchild*, Gardener at *Hoxton*, who propagated it in great Plenty; ſo that, in a few Years, it was diſtributed into moſt of the curious Gardens near *London*, and is now become common in moſt Parts of *England*.

It has a perennial Root, and an annual Stalk, which riſes Three or Four Feet high, according to the Goodneſs of the Soil in which it grows. It is hairy, and branches out on the Sides pyramidally. The Stalk and Branches are garniſhed with ſmall ſpear-ſhaped Leaves, about the Size of the common Hyſſop. They are hairy and rough to the Touch, ſtanding alternate, and have no Footſtalks. The Branches are each terminated by One large Flower, compoſed of many Florets and Half Florets, which are included in One common ſcaley Empalement, repreſented at *a*, whoſe Scales are reflexed. The Center (or Diſk) of the Flower *b* is compoſed of Hermaphrodite Florets, One of which is ſhewn at *d*. Theſe are funnel-ſhaped, and cut into Five Parts at the Top, which ſpread open. At the Bottom of the Tube is ſituated an oblong Germen *c*, with Five ſlender Stamina joined at their Bottom to the Style, which ſits upon the Germen, and is crowned with a bifid Stigma. The Border or Rays of the Flower is compoſed of Female Half Florets, repreſented at *e* and *f*. Theſe are tubulous at the Bottom; but above they are ſtretched out plain like a Tongue, and are of a beautiful blue Colour, ſpreading open like Rays. They ſit upon a hairy Germen *g*, and have a Style crowned with a bifid Stigma; but have no Stamina. The Germen of both turn to oblong Seeds crowned with a hairy Down.

This Plant flowers in *October*, and, in mild Seaſons, often continues in Beauty Two Months; making a fine Appearance in the Garden, when there is a Scarcity of other Flowers.

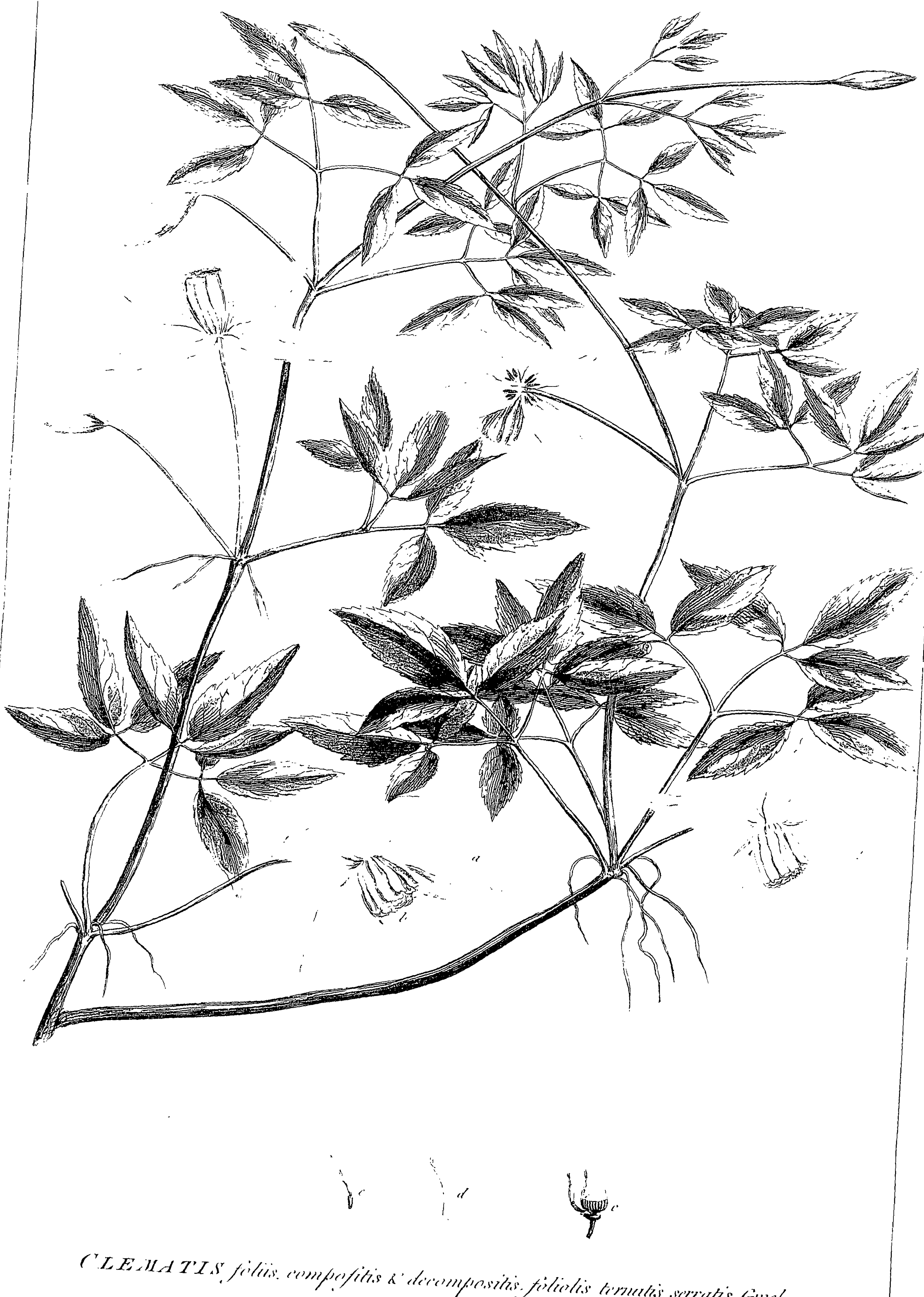


CALENDULA *foliis ovato-lanceolatis obtusis, caule fruticoso decumbente.*

J. Miller del. & sc.

Publish'd according to Act of Parliament by P. Miller, June 25: 1750.

Pl. CCLXXII



CLEMATIS foliis compoſitis & decompositis, foliolis ternatis serratis Gmel.

J. Miller delin & sculp.

Publish'd according to the Act by J. Miller in Maiden Lane Covent Garden June 25th 1759.

PLATE CCLXXIII.

Calendula, *Lin. Gen. Plant.* 885. *Raii Meth. Plant.* 36. *Caltha*, *Tourn. Inſt. R. H.* 498. *Tab.* 284. Marygold; in French, *Souci.*

THIS Genus of Plants is ranged in the Fourth Section of *Linnæus*'s Nineteenth Claſs, which includes thoſe *Plants whoſe Female Florets are fruitful, and the Hermaphrodite are barren. Tournefort* places it in the Fourth Section of his Fourteenth Claſs, which contains the *Herbs with a radiated Flower, whoſe Seeds are ſhut up in the Capſule.* Mr. *Ray* ranges it in his Eighth Claſs, which includes the *Plants with a compound radiated Flower, whoſe Seed have no Down.*

The Characters of the Genus are,

It hath a compound radiated Flower, compoſed of Female and Hermaphrodite Florets, included in One common ſimple Empalement. The Female Half-Florets make up the Border or Ray: Theſe are ſtretched out on One Side like a Tongue, and have no Stamina; but have a Three-cornered Germen ſupporting a ſlender Style, crowned by Two reflexed Stigmas; theſe are fruitful. The Hermaphrodite Florets, which form the Diſk, are tubulous, and cut into Five Parts at the Brim: They have Five ſhort ſlender Stamina terminated by cylindrical Summits. The Germen is ſituated in the Bottom of the Tube, ſupporting a ſlender Style, crowned by an obtuſe bifid Stigma; but theſe are barren. The Female Half-Florets are each ſucceeded by an oblong Seed with angular Membranes.

The Species here repreſented is,

Calendula *foliis ovato-lanceolatis obtuſis, caule fruticoſo decumbente.* Marygold with oval Spear-ſhaped blunt Leaves, and a ſhrubby trailing Stalk. Dr. *Van Royen* mentions this Plant, in his Appendix to the *Prodromus* of the *Leyden* Garden, by the Title of *Calendula foliis obverſe-ovatis denticulatis, caule fruticoſo perenni*, 531. Marygold with obverſe-oval indented Leaves, and a ſhrubby perennial Stalk.

This Plant grows naturally at the *Cape of Good Hope*; from whence the Seeds were brought a few Years paſt, and the Plants were raiſed in the *Dutch* Gardens. One of the Plants was ſent by Dr. *Adrian Van Royen*, late Profeſſor of Botany in the Univerſity of *Leyden*, to the Botanic Garden at *Chelſea*; and has been from thence communicated to ſeveral other curious Gardens.

The Stalk of this Plant becomes ſhrubby, and will riſe to the Height of Six or Eight Feet, if it is ſupported; otherwiſe it will trail on the Ground. It ſends out many Side-Branches, which grow diffuſed if they are not trained to Supports: They are garniſhed with fleſhy oval Spear-ſhaped Leaves, about Two Inches and a Half long, and almoſt an Inch broad in the broadeſt Part, which is toward the Top, the Tail next the Stalk being narrow. Moſt of the Leaves are intire; and their upper Surface is rough to the Touch. The Flowers are produced ſingly from the Side of the Stalk: The lower Part of the Footſtalk is garniſhed with a few ſmall Leaves of the ſame Shape with thoſe on the Branches; but the upper Part is naked, and terminated by a ſingle Flower. Each Flower is compoſed of Fourteen or Fifteen Half-Florets, which form the Border or Ray; one of which is repreſented at *a*: Theſe have a ſhort Tube at their Baſe; but are ſtretched out to a conſiderable Length on one Side in Shape of a Tongue, which is ſlightly indented at the Point in Three Parts. At the Bottom of the Tube is ſituated the Germen *b*, ſupporting the Style, which is bifid. *c* and *d* repreſent the Hermaphrodite Florets, which are tubulous, and cut into Five Parts at the Brim: Theſe have an imperfect Germen ſituated at the Bottom, ſupporting a Club-ſhaped Style *e*; one of which is magnified at *f*, having a Sheath or Cover of a purple Colour. *g* ſhews the Five Stamina, which are connected at the Top; and *h* repreſents One of them magnified. *i* ſhews the ſimple Empalement intire, which contains the Florets and Half-Florets. *k* is the ſame cut open longitudinally; and *l* ſhews the Germen ſeparated from the Style.

The Outſide of the Rays of the Flower is firſt of a purple Colour, which changes to blue as they decay; but their Inſide is white. The Florets which compoſe the Diſk or Middle are of a purple Colour; ſo that when the Rays are expanded, the Flower at a ſmall Diſtance appears white with a purple Bottom. The Plants produce their Flowers at all Seaſons of the Year; ſo make a pretty Appearance in the Greenhouſe during the Winter and Spring.

PLATE CCLXXIV.

Clematis, *Lin. Gen. Plant.* 616. *Clematitis*, *Tourn. Inſt. R. H.* 293. *Tab.* 150. *Raii Meth. Plant.* 69. Climber, or Virgin's Bower.

THIS Genus of Plants is ranged in the Seventh Section of *Linnæus*'s Thirteenth Claſs, which includes thoſe *Plants whoſe Flowers have many Stamina, and ſeveral Styles. Tournefort* places it in the Seventh Section of his Sixth Claſs, which includes the *Herbs with a Roſe-flower, whoſe Pointal becomes a Fruit with many Seeds collected into a Head.* Mr. *Ray* ranges it in his Fifteenth Claſs, which includes thoſe *Plants which have a naked Flower ſucceeded by many Seeds.*

The Characters of the Genus are,

The Flower has no Empalement, and is compoſed of Four oblong looſe Petals. It has many Awl-ſhaped Stamina, which are ſhorter than the Petals; and the Summits are fixed to their Side. It has many roundiſh compreſſed Germina with an Awl ſhaped Style, crowned by ſimple Stigmas. The Germina afterward become each a roundiſh compreſſed Seed, with the Style ſitting on the Top; and are collected into a Head.

The Species here repreſented is,

Clematis *foliis compoſitis & decompoſitis, foliolis ternatis ſerratis, Gmel.* Climber, or Virgin's Bower, with compound and decompounded Leaves by Threes, which are ſawed on their Edges.

This Plant grows naturally in *Tartary*, where it was diſcovered by Dr. *Gmelin*, who ſent the Seeds to the Imperial Garden at *Peterſburgh*, where they ſucceeded; and in 1753 I was favoured with ſome of the Seeds from that Garden, which have ſucceeded at *Chelſea*; and the Plants have flowered there ſome Years, but do not as yet perfect their Seeds.

The Stalks of this Plant are ſlender and weak, ſo muſt be ſupported, or they will fall to the Ground: Their lower Parts become ligneous, like ſome of the other Species: The Bark is brown and thin. At the Joints of the Stalks come out ſeveral Filaments, which have the Appearance of Roots, and are ranged between the Footſtalks of the Leaves. When the Plants are in a ſtrong Soil, and their Branches trained againſt a Wall, the Stalks will riſe to the Height of Six or Eight Feet. The Leaves have long Footſtalks, which generally divide into Three ſmaller; each of which ſuſtains Three oblong Lobes, or ſmall Leaves, about Two Inches long, and near One broad in the Middle, drawing to a Point at each End. They are of a deep green Colour, and are ſlightly ſawed on their Edges. The Footſtalks of the Flowers ariſe from the Joints of the Stalk: They are naked, Three or Four Inches long, and ſuſtain One Flower at the Top. The Flower is compoſed of Four oblong Petals repreſented at *a*, which are of a yellowiſh white Colour within: Theſe ſpread open wide; and in the Center are ſituated the Germina, with their Styles collected into a Head, as is ſhewn at *b*: Between theſe riſe the many Stamina, which are connected to the Styles. At *c* is repreſented the Cluſter of Germina ſeparated from the Petals; and at *d* is ſhewn a Stamen ſeparated from the Cluſter. A Germen with its Style is repreſented at *e*. After the Petals of the Flower are fallen, the Style becomes feathery, and ſerves as a Wing to tranſport the Seeds, when ripe, to diſtant Places.

The Flowers appear in *March* and *April*; and, if the Seaſon proves favourable, they make a handſome Figure: But as the Plant is apt to put out Leaves very early in the Spring, ſo they are frequently nipped by the Froſts in *March*, as are many other Plants and Trees of *Siberia* and *Tartary*; for theſe do generally begin to ſhoot with the firſt Warmth of Spring; and when there are Returns of Froſt afterward, their young Shoots are killed, and the Plants appear as dead till the Warmth of Summer brings out new Shoots.

PLATE CCLXXXV.

WARNERIA. Yellow Root.

THIS Plant has been lately introduced from *North America*, by the Title of *Yellow Root*: And the Characters of its Flower and Fruit being different from thoſe of all the eſtabliſhed Genera of Plants, I have given it the Name of *Warneria*, in Honour to *Richard Warner*, Eſq; of *Woodford* in *Eſſex*, who is a very curious Botaniſt, and a great Collector of rare Plants; of which he is very communicative to all Lovers of Gardening.

This Plant ſhould be ranged in the Seventh Section of *Linnæus*'s Thirteenth Claſs, which includes thoſe *Plants whoſe Flowers have a great Number of Stamina, or Male Parts, and many Styles.* And according to *Tournefort*'s Syſtem, it muſt be placed in the Seventh Section of his Sixth Claſs, which contains the *Herbs with a Roſe flower, whoſe Pointal turns to a Fruit compoſed of many Seeds collected into a Head.* By *Ray*'s Method, it muſt be placed in his Fifteenth Claſs, which includes the *Herbs with a naked Flower ſucceeded by many Seeds.*

The Characters of this Genus are,

The Flower has no Empalement: It has Three roundiſh Petals, which fall off very ſoon; and a great Number of Club-ſhaped Stamina terminated by oval Summits, with ſeveral roundiſh Germen ſupporting a very ſhort Style, crowned by a permanent bifid Stigma. The Germen afterward turns to a Berry compoſed of many roundiſh Acina collected into a Head, each having One Cell including a ſingle Seed.

We know but One Species of this Genus at preſent; which is here repreſented.

WARNERIA. Called in *North America Yellow Root*.

This Plant grows naturally in *Penſylvania*; from whence the Roots have been ſent to *England*, and are preſerved in the Gardens of the Curious. The Root is fleſhy, of an irregular Form, having a yellow Skin or Cover; from whence it received its Title of *Yellow Root*: This ſends out many Fibres, which ſpread on every Side. From the Root ariſe Two, Three, or more Footſtalks, in proportion to their Strength: Theſe are from Four to Nine or Ten Inches high; and at their firſt Appearance are of a light Green; but afterward change to a purpliſh Colour, and are hairy toward the Top. Each Footſtalk ſuſtains One or Two Leaves; the lower of which have Footſtalks, but thoſe above embrace the Stalk. The Flower is ſituated at the Top of the Stalk, a little above the upper Leaf, as is repreſented at *a*. The Leaves are Six or Seven Inches Diameter: They are deeply cut into Three, Four, or Five Lobes, which are irregularly ſawed on their Edges: They are of a light Green in the Spring; but change afterward to a deep Green, with ſome dark Spots or Marks, and after the Flower is decayed they turn to a purpliſh Colour. The Flower is compoſed of Three roundiſh Petals, repreſented at *b*, which are of an herbaceous white, with Borders of a red Colour; and are of very ſhort Duration, ſeldom remaining longer than Three or Four Hours after they are expanded. The Middle of the Flower is occupied by a great Number of Stamina, repreſented at *c*; one of which, ſeparated from the Flower, is ſhewn at *d*, having its Summit at the Top. *e* ſhews one of the Germina, with its Style and bifid Stigma, of the natural Size; and *f* is one magnified. *g* ſhews the Fruit when ripe, which is compoſed of ſeveral Acini like the Strawberry, of a bright red Colour, and is ſucculent: Each of the Acini have One Cell including an angular Seed.

The Flowers of this Plant appear in *May*, and the Fruit ripens the latter End of *July*. The Leaves decay in the Autumn, and new ones ariſe in the Spring.

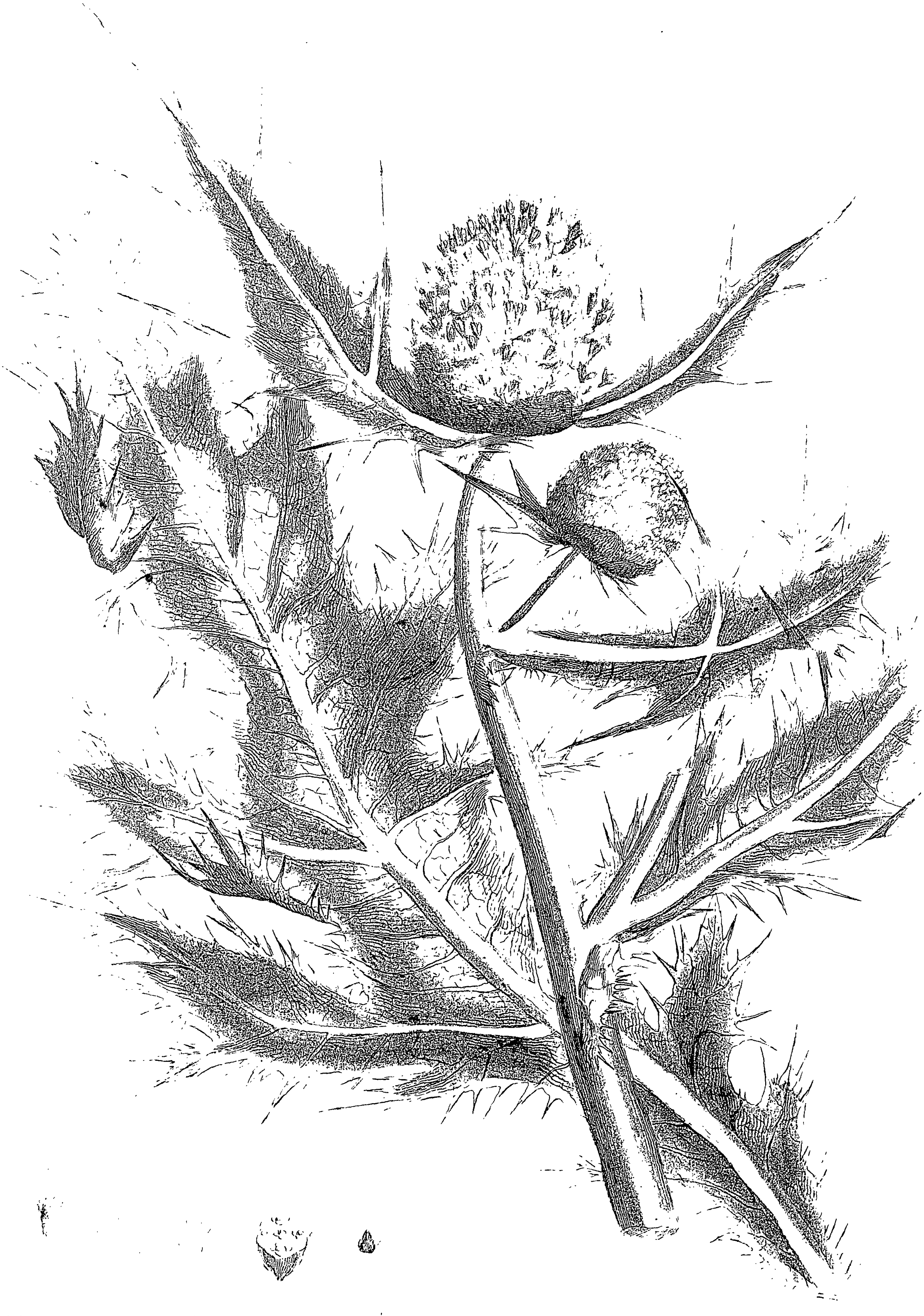


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PLATE CCLXXXVI.

MARTYNIA, *Houſt. MSS. Lin. Gen. Plant.* 671. *Martyn. Dec.* 5. 42.

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Fourteenth Claſs, which includes the Plants with ringent Flowers, which have Two long and Two ſhorter Stamina, and their Seeds are incloſed in a Capſule.

The Characters of the Genus are,

The Empalement of the Flower is cut into Five acute Segments; Three of the upper are erect, the Two under are reflexed. The Flower is of One Petal, which is Bell-ſhaped, ringent, and divided into Five large obtuſe Parts at the Brim, where it ſpreads open wide, in Form of a Lip-flower: The Two upper and Two Side Segments are nearly equal in Size; theſe have their Edges reflexed: The lower Segment is larger, and crenated at the Point. It has Four Stamina, Two longer and Two ſhorter, with the Rudiment of a Fifth between the Two upper: Theſe are terminated by oblong Summits, which join; but on their being handled ſeparate immediately. It has an oblong Germen ſituated in the Empalement, ſupporting a ſingle Style the Length of the Stamina, crowned by a bifid Stigma. The Germen afterward turns to an oblong Capſule including a ligneous Nut ſhaped like a Beetle, with Two incurved Horns, divided into Four Cells, which include Three or Four Seeds in each.

The Species here repreſented is,

MARTYNIA *caule ramoſo, foliis cordato-ovatis piloſis.* Martynia with a branching Stalk, and oval Heart-ſhaped hairy Leaves.

The Seeds of this Plant were brought from *Miſſiſſippi* to the Gardens at *Paris*, where it was firſt propagated; and the Plants ripened their Seeds there, ſome of which were ſent me by Mr. *Richard*, the King's Gardener at *Verſailles*. Theſe were ſown in the *Chelſea* Garden; but they remained in the Ground a Year before they began to vegetate; ſo that I almoſt deſpaired of their growing: But in *April* following Two of the Plants made their Appearance: Theſe were tranſplanted each into a ſeparate Pot, and plunged into a moderate Hot-bed, which brought them forward; and in Six Weeks after the Plants produced their Flowers, and continued flowering a long Time.

The Stalk of the Plant is as thick as a Man's little Finger: It is ſoft, ſucculent, and covered with a ſoft hairy Down. It riſes about Two Feet high, divided into Two or Three Branches; and is garniſhed with oval Heart-ſhaped Leaves placed without Order. The Footſtalks are from Two to Four Inches long: The Leaves are Four Inches long, and as much in Breadth at the Baſe, where they are divided at the ſetting on of the Footſtalk into Two roundiſh Ears: The upper Part is narrower, and ends in a blunt Point: They are viſcous and clammy to the Touch, 'of a ſoft green Colour, and covered with fine ſhort Hairs. The Stalk is terminated by a looſe Spike of Flowers, ſtanding upon Footſtalks, which are Two Inches long. The Empalement of the Flower is divided into Five Parts almoſt to the Bottom, as is repreſented at *a*: The Three upper Segments are narrow, ending in acute Points; the Two lower are broad, and divided into Lobes The Flower is of the Bell-ſhape, having a large ſpreading Tube, which is ſmooth, roundiſh at the Baſe, and ſwelling upward: The Brim is large, and divides into Five obtuſe Segments; the Three upper. *c*, *c*, *c*, are nearly equal in Size; the Two under are larger, crenated on their Edges, and form the under Lip, as is ſhewn at *d*. The Inſide of the Tube is marked with many purple Spots; but the Brim, or Lips, is of a dirty White. Each Flower has Four Stamina, repreſented at *e*, Two of which are longer than the other, terminated by oblong Summits, which are connected together; but on their being touched ſeparate and ſpread aſunder. Between the Stamina is ſituated the Style *b*, which is crowned by a bifid Stigma, and ariſes from the Germen, which ſits in the Empalement at the Bottom of the Tube, as is ſhewn at *i*; and *k* repreſents the Style with its Stigma ſeparated from the Flower. After the Flower is paſt, the Germen ſwells to a large hard Fruit, ending with Two long incurved Horns, repreſented at *l*, which has a thick Cover like the outer Shell of a Walnut: This ſplits and falls off when the Fruit is ripe, leaving the hard Shell bare, which is divided into Four Cells, each containing Two or Three oval Seeds, repreſented at *m*. At *n* is repreſented the Fruit cut thro' longitudinally, to ſhew how the Seeds are lodged. The Flowers appear in *June* and *July*, which have a fragrant Scent, and the Fruit ripens in the Autumn; ſoon after which the Plants decay.

PLATE CCLXXXVII.

GUNDELIA, *Tourn. Cor. Inſt.* 51. *Tab.* 486. *Lin. Gen. Plant.* 828.

THIS Genus of Plants belongs to the Fifth Section of *Tournefort*'s Twelfth Claſs, which includes the *Herbs with a floſculous Flower collected into a Head. Linnæus* ranges it in the Firſt Section of his Nineteenth Claſs.

The Characters of the Genus are,

The Head is compoſed of many Florets, which are Hermaphrodite, having a Circle of ſmall Leaves under, which ſerve as a common Empalement. The Florets are of One Petal, bellied and cut into Five Segments at the Brim: They have each Five ſhort Hair-like Stamina, terminated by long cylindrical tubulous Summits, and an oval Germen immerſed in the Receptaculum, ſupporting a Style, which is longer than the Petal, crowned by a bifid Stigma. The Germen afterward becomes a Fruit pregnant with Seeds, which ripen in the Receptacle.

The Species here repreſented is,

GUNDELIA *foliis pinnatifidis ſpinoſis, capite araneoſa lanugine obſita.* Gundelia with Wing-pointed prickly Leaves, and a webbed woolly Head.

This

This Plant was diſcovered by Dr. *Tournefort* growing naturally in *Armenia*, who gave it this Title in Honour of his Fellow-Traveller Dr. *Gundelſheimer*, a *German* Phyſician. The *Arabian* Name is *Hacub*.

The Root is perennial, and runs deep into the Ground. The Leaves decay in Autumn, and new ones come out in the Spring: Theſe are a Foot and Half long: They are irregularly cut and ſlaſhed on the Edges, and armed with long ſtiff Spines of a brown Colour; with a broad Midrib, from whence are ſent out many ſtrong Veins on each Side. Between the Leaves ariſes the Flower-ſtalk, which is as thick as a Man's Thumb, about Two Feet high, ſending out Side-Branches from the Ground upward: Theſe are each terminated by an oval Head of Flowers, having Two or Three Leaves immediately under each, which ſerve as a common Empalement. The Florets are tubulous, and cut into Five Parts at the Brim, as is repreſented at *a* and *d*. In the Center of the Tube is ſituated the Style, which riſes above the Petal, and is crowned by a bifid reflexed Stigma *e*. At *f* is ſhewn the Germen, ſituated under the Tube. *g* repreſents the Tube cut open longitudinally, to ſhew how the Five Stamina are connected round the Style. *h* repreſents the Tube ſpread open. *i* ſhews the Fruit cut open horizontally, to repreſent the Five Cells, which are ſeldom all fruitful; for there are rarely more than Two or Three Seeds which come to Maturity in each Fruit, the others are abortive. At *k* is ſhewn one of the Seeds ſeparated from the Receptacle.

This Plant flowers in *June*, and the Seeds ripen in *Auguſt*. Altho' the Flowers of this Plant are not very ſpecious, yet the Leaves being long, their Borders variouſly cut, and having large white Ribs, they make a good Appearance. The Seeds of this Plant were given me by Dr. *Alexander Ruſſel*, of *Lime-ſtreet*, *London*, who procured them from *Aleppo*.

PLATE CCLXXXVIII.

FRAGARIA, *Tourn. Inſt. R. H.* 295. *Tab.* 152. *Lin. Gen. Plant.* 558. Strawberry; in French, *Fraiſier*.

THIS Genus of Plants is ranged in the Seventh Section of *Tournefort*'s Sixth Claſs, which includes the *Herbs with a Roſe-flower, whoſe Pointal turns to a Fruit compoſed of many Seeds collected into a Head.* Dr. *Linnæus* ranges it in the Fifth Section of his Twelfth Claſs, which includes thoſe Plants whoſe Flowers have about Twenty Stamina, which are inſerted in the Empalement, and many Styles.

The Characters of the Genus are,

The Empalement of the Flower is plain, of One Leaf; which is cut deeply into Ten or Twelve acute Segments, which are alternately large and ſmall, and is permanent. The Flower has Five or Six roundiſh Petals, which are inſerted in the Empalement; and about Twenty Awl-ſhaped Stamina, which are ſhorter than the Petals, terminated by lunular Summits; and a great Number of ſmall Germina collected into a roundiſh Head, each having a Style inſerted to their Sides, crowned by ſingle Stigmas. The Germina afterward turn to an oval pulpoſe ſoft Fruit ſitting on the Empalement, having many ſmall Seeds.

The Species here repreſented is,

FRAGARIA *foliis ovatis crenatis nervoſis, calycibus maximis.* Strawberry with oval crenated veined Leaves, and the largeſt Empalement.

This Sort of Strawberry has been of late Years introduced into the *Engliſh* Gardens; but from whence it came we are at a loſs to know. Some Perſons have affirmed it was brought from *Louiſiana*; others that it came from *Virginia*; but I recieved ſome Plants of this Kind from a curious Gentleman of *Amſterdam*, who aſſured me they were brought from *Surinam*.

The Leaves of this Sort have a great Reſemblance to thoſe of the Scarlet Strawberry; but are larger, of a thicker Subſtance, and the Indentures of their Edges are blunter: The Runners from the Sides of the Plants are much larger, and are hairy: The Footſtalks of the Flowers are ſtronger, the Flowers are much larger, and the Fruit approaches in Size, Shape, and Colour, to the *Chili* Strawberry. Whether this is a diſtinct Species, or an accidental Variety which came from Seeds, I ſhall not take upon me to determine, ſince it has an Affinity to Two or Three other Species. But as this Sort produces a great Quantity of Fruit, when the Plants are kept clear from Runners, and the Fruit is very large, ſo it is worthy of Cultivation.

a repreſents the Empalement of the Fruit, which is deeply cut into Twelve acute Segments, Six of which are alternately larger than the other. *b* ſhews the Six round Petals of the Flower; *c* the numerous Stamina and Styles in the Center; and *d* repreſents the Fruit, when ripe, of the natural Size. *e* ſhews the Empalement ſeparated from the Fruit; *f* One of the Stamina, with its Summit; *g* One of the Styles, ſitting on the Germen, and *h* One of the Seeds ſeparated from the Fruit.

PLATE

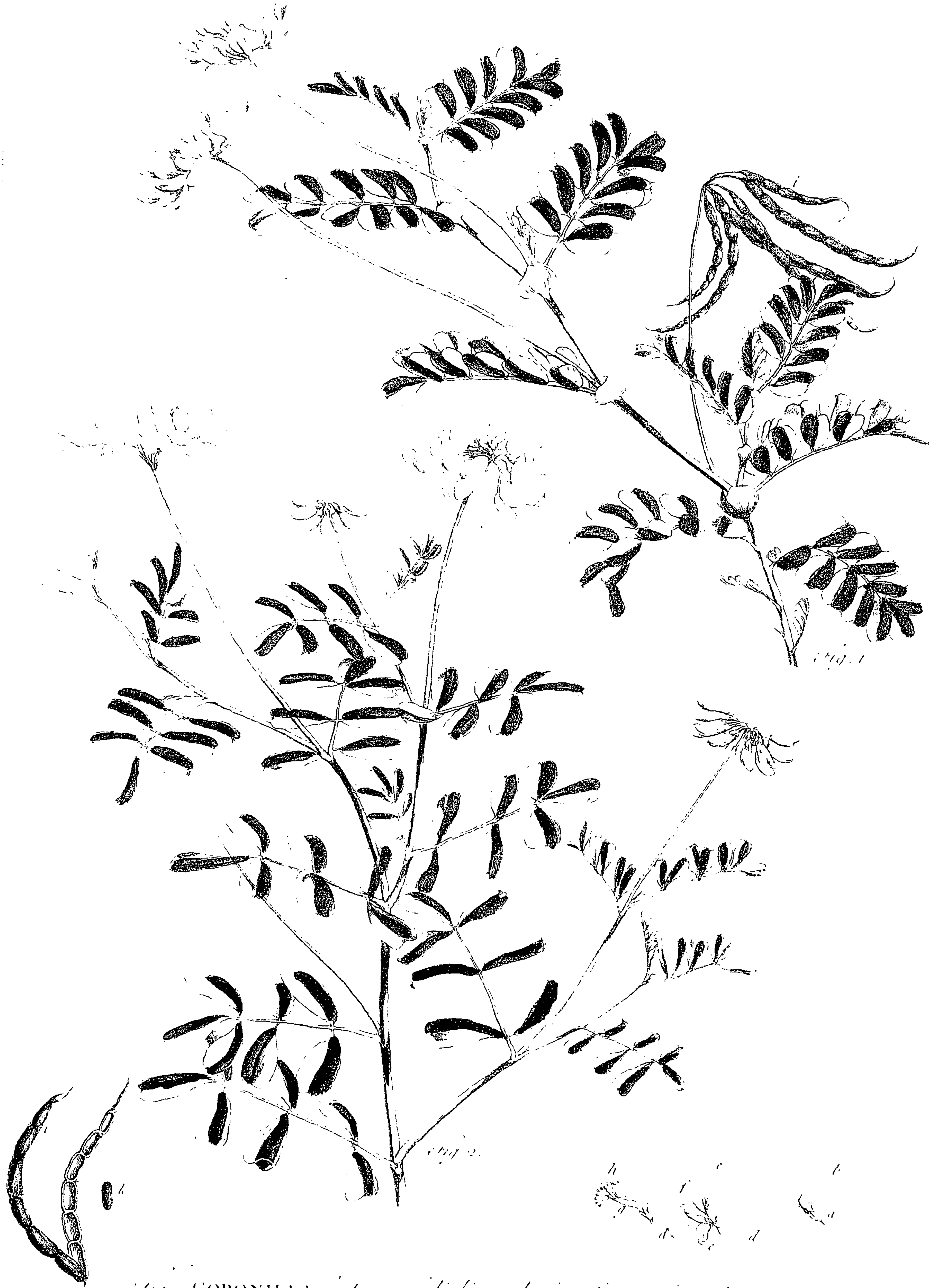


Fig. 1. CORONILLA fruticosa foliolis undenis extimo majore. Lin. Sp. plant. 743.
Fig. 2. CORONILLA fruticosa, leguminibus crassioribus.

Lancake delin.
J. S. Miller sc.
Published according to Act of Parliament by P. Miller August 31st 1759.

PLATE CCLXXXIX.

Coronilla, *Tourn. Inſt. R. H.* 650. *Tab.* 419. *Raii Meth. Plant.* 163. *Lin. Gen. Plant.* 789. Jointed podded Colutea, *vulgo.*

THIS Genus of Plants is ranged in the Third Section of *Tournefort*'s Twenty-ſecond Claſs, which includes the *Trees and Shrubs with papilionaceous Flowers, whoſe Leaves are compoſed of ſeveral Pairs of Lobes placed on each Side the Midrib.* Mr. *Ray* ranges it, in his Appendix, amongſt the *Trees with papilionaceous Flowers and winged Leaves, whoſe Branches have no Spines.* Dr. *Linnæus* places it in the Third Section of his Seventeenth Claſs, which contains the *Plants which have Butterfly Flowers with Ten Stamina, Nine of which are united together, and the other is ſeparated.*

The Characters of the Genus are,

The Empalement of the Flower a *is of One Leaf, ſhort, compreſſed, and erect, divided into Two Parts, which are indented in Five Parts at the Brim; the Three under Segments are ſmall, and the Two upper join together. The Flower* b *is papilionaceous; the Standard* c *is Heart-ſhaped, erect, and larger than the Wings.* d, d, *are the Two Wings expanded; theſe are oval, and, in their natural State, converge towards each other. The Keel* e *is ſhorter than the Wings; it is compreſſed, pointed, and turns upward. It hath Ten Stamina* f, *Nine of which are joined at* g, *and One is ſeparated at* h; *theſe riſe to almoſt a right Angle with their Baſe, and have broad yellow Summits. The Germen is taper and oblong, ſupporting a briſtly Style, crowned by a ſmall obtuſe Stigma. The Germen afterward becomes a long ſlender Pod* i, *with One Cell, divided into ſeveral Joints, each containing One oblong Seed, marked* k.

Fig. 1. Coronilla *fruticoſa, foliolis undenis, extimo majore, Lin. Sp. Plant.* 745. Shrubby-jointed podded Colutea, whoſe Leaves are compoſed of Eleven Lobes, the outer Ones being larger than the inner.

This Plant riſes with a ſhrubby Stalk, from One to Three Feet high, dividing into many ſmall Branches, which are garniſhed with Leaves placed alternately, each being compoſed of Eleven inverted Heart-ſhaped Lobes, which are of a ſilvery-green Colour, and ſit cloſe to the Midrib, each Leaf having Two large oval Stipulæ at their Baſe, ending in a Point; which Character diſtinguiſhes this Species from the others of the Genus. The Flowers ſtand upon long Footſtalks, which ariſe from the Wings of the Leaves, and are cluſtered together in a Sort of Head at the Top; they are of a bright yellow Colour, and of the Butterfly Kind of Flowers, having Two Wings on the Side, a Standard which is erect, and a compreſſed Keel at the Bottom, as is repreſented in the Figure, with Nine Stamina joined, and One ſtanding ſeparate; theſe, with the Germen and Style, are ſhut up in the compreſſed Keel of the Flower, which turns upward at the Point. The Flowers appear in *April*, and, when they decay, the Germen ſwells to Pods about Two Inches long, divided into Three or Four Joints, each containing One oblong Seed, which ripen the latter Part of Summer.

Dr. *Linnæus* has ſuppoſed this Plant to be the ſame with that which is figured by *Proſper Alpinus*, in his Book of Exotic Plants, in which he has been followed by ſeveral Authors; but whoever will examine the Figure and Deſcription given by *Alpinus*, will find his Plant has not thoſe remarkable Stipulæ to the Leaves, as has the Plant here repreſented, which is ſo remarkable as not to have been omitted by an Author ſo accurate as *Alpinus*. The Seeds of this Plant were ſent me from *Paris*, and the Plants which aroſe here have all this Character, and their Leaves retain the ſilvery Colour; ſo that it is certainly different from the Plant which we exhibited in the 106th Plate, though we then ſuppoſed they were the ſame.

Fig. 2. Coronilla *fruticoſa, leguminibus craſſioribus, foliolis ſeptenis æqualibus.* Shrubby-jointed podded Colutea, with thicker Pods, and Seven equal Lobes to each Leaf.

This Plant riſes with a ſhrubby Stalk to the Height of Four or Five Feet, ſending out Branches on every Side, which are taper, ſmooth, and of a light-green Colour, which are garniſhed with Leaves placed alternately. Theſe are, for the moſt Part, compoſed of Seven broad inverted Heart-ſhaped Lobes, of a light-green Colour on their upper Side, but are grey on their under Side, ſtanding upon very ſhort Footſtalks. Theſe Leaves have no Stipulæ to their Baſe, as thoſe of the former, but are naked. They are Three Inches long, and ſuſtain at the Top a Cluſter of yellow Flowers in a Head, which are ſhaped like thoſe of the former Sort, but are larger and of a lighter Colour. Theſe have an Odour like the Jonquil, but not ſo ſtrong. The Flowers of this appear the End of *October*, and continue in Succeſſion till *April*; ſo that the Plants make a fine Appearance all the Winter Seaſon, when there is a Scarcity of Flowers; and as the Plant is ſo hardy as to live abroad in warm Situations, or may be kept with a little Shelter in Winter, ſo it is worthy of a Place in every good Garden.

As this Plant has not been figured or deſcribed by any Botanic Writer which we have met with, ſo we thought it worthy of a Place in this Work.

PLATE CCXC.

Helianthemum, *Tourn. Inſt. R. H.* 248. *Tab.* 128. *Helianthemum, ſive Chamæciſtus, Raii Meth. Plant.* 109. *Ciſtus, Lin. Gen. Plant.* 598. Dwarf Ciſtus, or Dwarf Heliotrope.

THIS Genus of Plants is ranged by *Tournefort* in the Second Section of his Sixth Claſs, which includes the *Herbs with a Roſe Flower, whoſe Pointal or Empalement becomes a Fruit with One Capſule or Cell.* Mr. *Ray* places it in the Firſt Section of his Twenty-ſecond Claſs, which contains the *Herbs with Flowers having Five Petals, whoſe Seeds are incloſed in a Capſule.* Dr. *Linnæus* ranges it in the Firſt Section of his Thirteenth Claſs, which includes thoſe *Plants whoſe Flowers have a great Number of Stamina, and but One Style*; and joins the Plants of this Genus with the *Ciſtus*, the Flowers of both agreeing well together in their Characters; but as the Fruit of the *Ciſtus* has Five Cells, which contains the Seeds, ſo *Tournefort* ſeparated them, and has put them in different Sections of his Sixth Claſs.

The Species here repreſented is,

Cistus *fruticoſus erectus, foliis oppoſitis ſeſſilibus oblongis, utrinque incanis, calycibus triphyllis.* Shrubby erect Rock-roſe, with oblong Leaves growing oppoſite, which ſit cloſe to the Branches, are hoary an both Sides, and the Flowers have a Three-leaved Empalement. This is the *Helianthemum Algarvienſe, Halimi folio, flore luteo, punicante macula inſignito, Tourn. Inſt. R. H.* 250. Dwarf Ciſtus of *Algarve*, with a Sea-purſlain Leaf, and a yellow Flower, marked with purple Spots.

This Plant riſes to the Height of Three Feet; the Stalk is ſhrubby, and is covered with a brown Bark; the Branches come out oppoſite, and croſs each other, ſo as to form a Sort of Pyramid, the lower Branches being the longeſt, and diminiſh gradually to the Top; theſe are garniſhed with Spear-ſhaped Leaves about One Inch long, and a Third of an Inch broad in the Middle, drawing to a Point at each End; they are of a hoary Whiteneſs on both Sides, like thoſe of the Sea-purſlain, and are placed oppoſite on the Branches. The Footſtalks, which ſuſtain the Flowers, are a Continuation of the Branches, and are naked a conſiderable Length below the Flowers, which come out upon ſeparate Footſtalks near Two Inches long, which are ranged by Pairs oppoſite, each being terminated by One Flower, compoſed of Five Heart-ſhaped Petals of a bright yellow Colour, each having a purple Spot near the Tail or Bottom. Theſe have an Empalement compoſed of Three Leaves ending with ſharp Points, repreſented at *a*; at *b*, the Flower is repreſented fully expanded. *c* ſhews the Buds of the Flowers, which are frequently produced by Pairs on the ſame Footſtalk, One of which falls off without ſhewing the Flowers; ſo that there is but One Flower upon each Footſtalk which opens. The Petals of this Flower continue but a very ſhort time before they fall off: The Flowers, which are fully expanded in the Morning, at which time they make a beautiful Appearance, are over before Noon; by which time all their Petals will have fallen off. In the Center of the Petals is ſituated a roundiſh Germen, repreſented at *e*, which is attended by a great Number of Stamina, repreſented at *f*; One of which, with its Summit, is ſhewn at *d*. This Plant flowers in *June* and *July*; but the Seeds ſeldom come to Maturity in *England*. It grows naturally in *Spain* and *Portugal*, from whence I have received the Seeds.

As the Characters of this Genus have been already exhibited under the Article *Ciſtus* in this Work, ſo we have not inſerted them here. The Beauty of this Plant engaged us to give its Figure and Deſcription, eſpecially as they have not been done in any Botanic Work yet extant.

PLATE CCXCI.

Acacia, *Tourn. Inſt. R. H.* 605. *Tab.* 375. *Raii Meth. Plant.* 161. *Mimoſa, Lin. Gen. Plant.* 597. *Egyptian* Thorn; in French, *Caſie.*

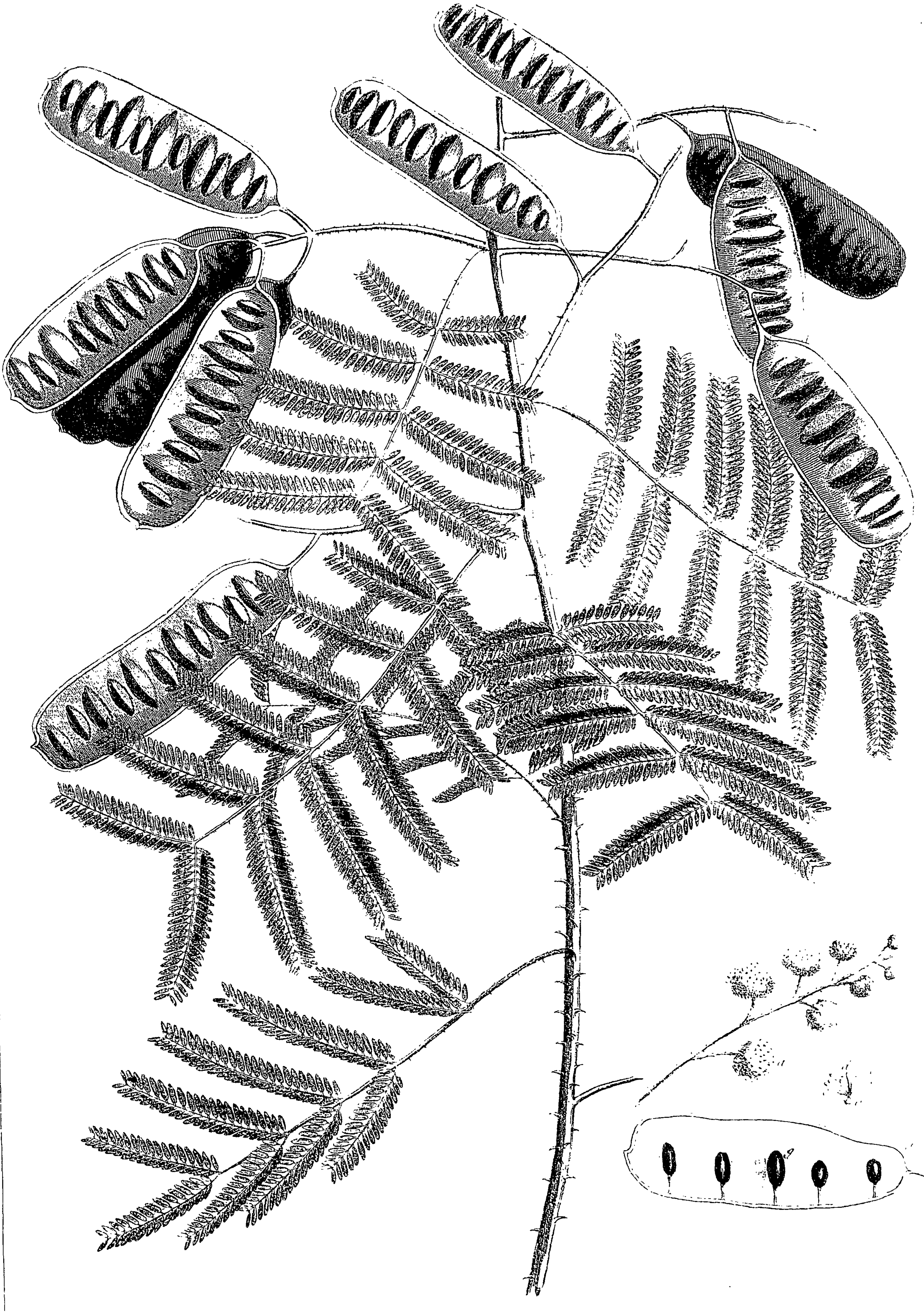
THIS Genus is ranged in the Fifth Section of *Tournefort*'s Twentieth Claſs, which includes the *Trees and Shrubs with a Flower of One Petal, whoſe Pointal becomes a podded Fruit.* Mr. *Ray* places it among the *Trees whoſe Flowers are collected in globular Heads.* Dr. *Linnæus* has joined all the Species of this Genus to the *Mimoſa*, or Senſitive Plant, which he ranges in the Firſt Section of his Thirteenth Claſs, which includes thoſe *Plants whoſe Flowers have many Stamina and One Style.*

The Characters of this Genus having been already exhibited in this Work, we ſhall not repeat them here.

The Species here repreſented is,

Acacia *foliis bipinnatis conjugatis, foliolis æqualibus, ſtipulis ſpinoſis, ſiliquis latis. Egyptian* Thorn with double winged Leaves, whoſe Lobes are equal, the Stipulæ thorny, and the Pods broad. The late Dr. *William Houſtoun* ſent the Seeds and Specimen of this Tree to *England* by the following Title: *Acacia ſpinoſa tenuifolia, ſiliquis latis, ſpinis minimis recurvis ſolitariis.* Prickly *Egyptian* Thorn, with narrow Leaves, broad Pods, and very ſmall recurved Spines ſtanding ſingly.

This Tree grows naturally at *Carthagena* in *New Spain*, where it was diſcovered by the Gentleman before-mentioned. It there riſes with a ſlender Stem to the Height of Twenty Feet, ſending out many weak Branches on every Side, which are armed with crooked Spines ſtanding ſingly. The Leaves are doubly winged; they are compoſed of Five or Six Pair of Wings placed oppoſite, and theſe are each garniſhed with upwards of Twenty Pair of narrow oblong ſmall Leaves or Lobes, placed along the Midrib, which is alſo armed with very ſmall Spines. From the Wings of the Stalk come out the Footſtalks, which ſuſtain the Flowers; theſe are from Four to Seven or Eight Inches long, and have ſmall Footſtalks branching from them, each being terminated by a globular Head of Flowers, repreſented at *a*, which are of a pale yellow Colour. The Flowers, which compoſe the Head, are tubulous, and cut at the Brim into Four or Five ſhort Segments, and incloſe a great Number of Stamina, crowned with oval Summits, repreſented at *c*, *c*. The Germen *b* is ſituated at the Bottom of the Tube, ſupporting a Style the Length of the Stamina, as is ſhewn at *d*. The Germen afterward becomes a long broad Pod, repreſented at *f*, having ſeveral oblong oval Seeds, marked *g*, which are alternately larger than the other.

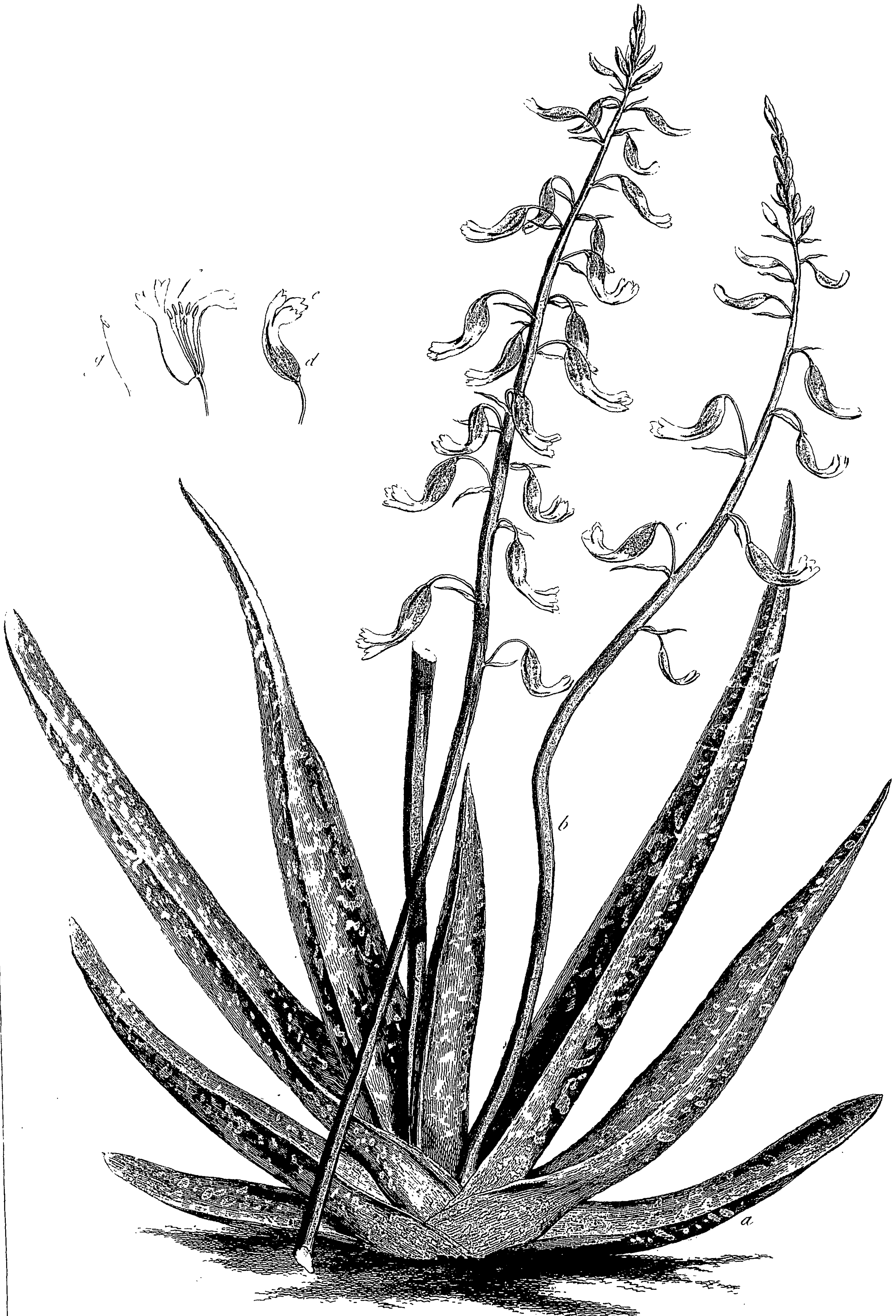


ACACIA *foliis pinnatis conjugatis foliolis æqualibus ſtipulis ſpinoſis, ſiliquis latis.*

G. D. Ehret pinx.

J. Mac[illegible]

Published according to Act of Parliament by J. Miller [illegible]



ALOE. *foliis linguiformibus variegatis, floribus pedunculatis cernuis ore inæqualis.*

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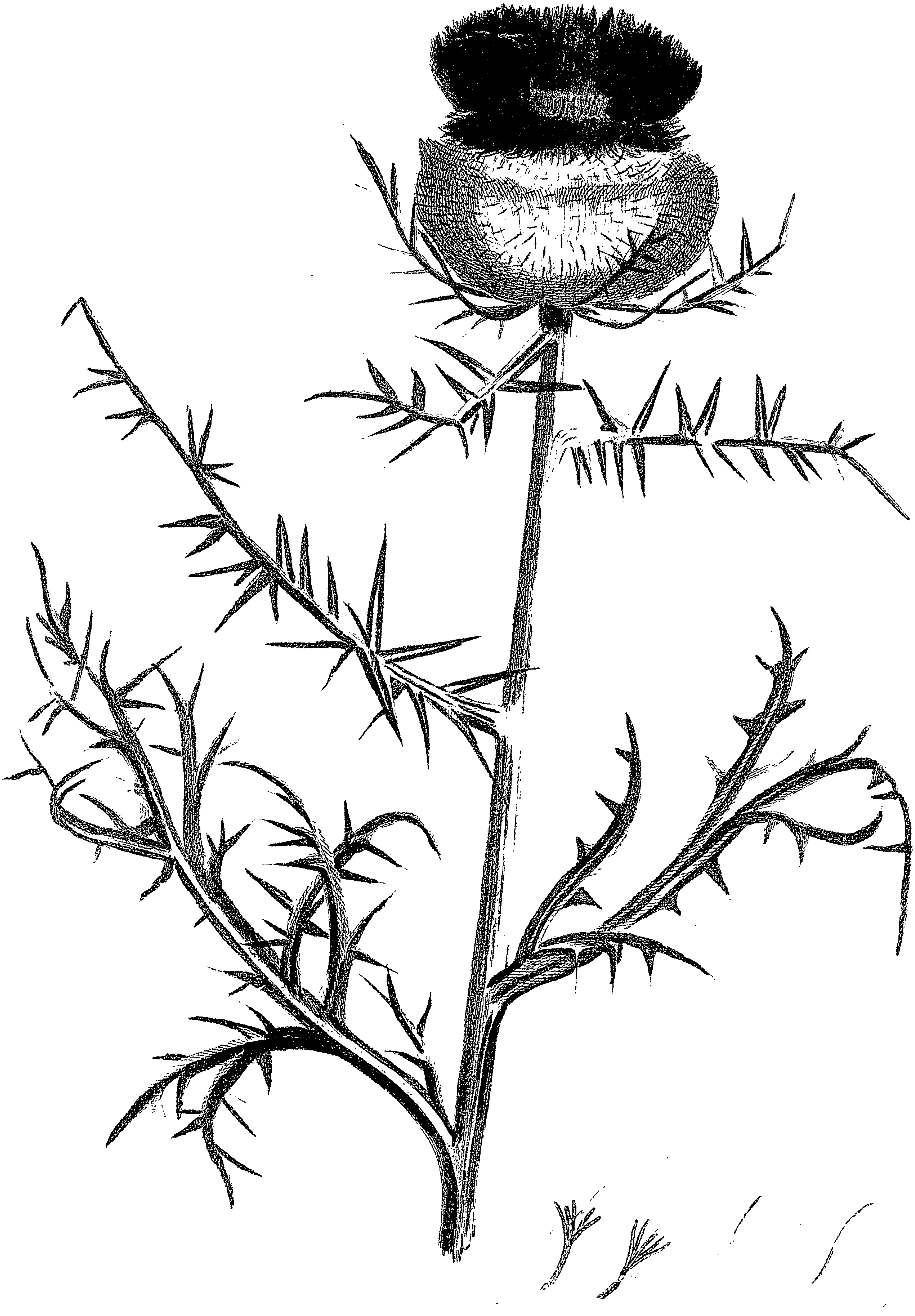
J. Miller del. & sc.



CARDUUS [illegible]

PLATE CCXCII.

ALOE, *Tourn. Inſt. R. H.* 366. *Tab.* 191. *Raii Meth. Plant.* 117. *Lin. Gen. Plant.* 389. Aloe.

THIS Genus of Plants is ranged in the Second Section of *Tournefort*'s Ninth Claſs, which includes the *Herbs with a Lily Flower of One Petal cut into Six Parts, whoſe Empalement becomes the Fruit.* Mr. *Ray* places it in the Second Section of his Twenty-third Claſs, which contains the *Plants with a Flower of One Leaf, divided into Six Parts at the Top, whoſe Flowers ſit upon the Fruit.* And he very juſtly blames *Tournefort* for the Looſeneſs of his Characters; for, as he obſerves, the Flowers have no Empalement, but ſit upon the Embryo of the Fruit, and are naked. Dr. *Linnæus* ranges it in the Firſt Section of his Sixth Claſs, which includes thoſe *Plants whoſe Flowers have Six Stamina and One Style.*

The Characters of this Genus having been already exhibited in this Work, we ſhall not repeat them here.

The Species here repreſented is,

ALOE *foliis linguiformibus variegatis, floribus pedunculatis cernuis, ore inæquali.* Aloe with variegated Tongue-ſhaped Leaves, and nodding Flowers upon Footſtalks, whoſe Brims are unequal.

This Aloe was raiſed from Seeds in the *Chelſea* Garden, which were brought from the *Cape of Good Hope* by Captain *Hutchinſon* of the *Godolphin Indiaman*, and the laſt Summer it flowered for the firſt time in *England*, which engaged us to give a Repreſentation of the Plant in this Work, as it is One of the moſt beautiful Species of this Genus.

The Leaves of this Plant are thick, ſucculent, and flat, ſhaped like a Tongue, but terminate in a Point; the longeſt Leaves are about Six Inches, but the lower Ones, marked *a*, are not more than Three, and their Breadth at the Baſe, where they are broadeſt, an Inch and a Quarter. Theſe Leaves embrace each other at their Baſe. Their Surface is ſmooth on both Sides. They are of a deep-green Colour, finely marbled with white on every Side. Between the Leaves come out the Footſtalks of the Flowers, repreſented at *b*; theſe are naked, and riſe a Foot and half high, their upper Part being garniſhed with Flowers, ſtanding upon ſhort nodding Footſtalks, repreſented at *c* The Flowers are tubulous and recurved, as is ſhewn at *d*. The Mouth or Rim of the Tube is cut into Six unequal Parts, as is repreſented at *e*. The tubulous Part of the Flower is of a bright Coral Colour; but the Mouth is of a dirty White. Within the Tube there are Six Stamina, terminated by headed Summits, as is ſhewn at *f*. Theſe are ſhorter than the Petal of the Flower; and between theſe is ſituated a ſlender Pointal of the ſame Length, crowned by a pointed Stigma. The Flowers of this Plant appear in *July*; but they have not as yet been ſucceeded by Fruit in *England*.

PLATE CCXCIII.

CARDUUS, *Tourn. Inſt. R. H.* 440. *Tab.* 253. *Raii Meth. Plant.* 40. *Lin. Gen. Plant.* 832. Thiſtle; in French, *Chardon*.

THIS Genus is ranged in the Second Section of *Tournefort*'s Twelfth Claſs, which includes the *Herbs with floſculous Flowers, whoſe Seeds are crowned with Down.* Mr. *Ray* places it in his Ninth Claſs, which contains the *Plants with compound Flowers, having many piped Florets collected in a Head.* Dr. *Linnæus* ranges it in the Firſt Diviſion of his Nineteenth Claſs, which includes the *Plants with Flowers compoſed of many hermaphrodite Florets, whoſe Stamina and Style are connected at their Baſe.*

The Species here repreſented is,

CARDUUS *foliis ſeſſilibus bifariam pinnatifidis, laciniis alternis erectis, calycibus globoſis villoſis, Hort. Upſal.* 249. Thiſtle with Leaves ſitting cloſe to the Stalks, which are two Ways Wing-pointed, the Jags being alternate and erect, and globular Empalements, which are hairy. This Plant is titled by *Caſpar Bauhin*, *Carduus capite rotundo tomentoſo, Pin.* 382. Thiſtle with a round woolly Head. *Tournefort*, and ſome others, have adapted the ſame Title; but *Parkinſon* calls it, in his *Herbal*, *Carduus tomentoſus, corona fratrum dictus, p.* 978. Woolly Thiſtle, called Friers Crown; the common *Engliſh* Title is Woolly-headed Thiſtle.

This Plant grows naturally in ſeveral of the middle Counties of *England*, as in *Warwickſhire*, *Northamptonſhire*, *Leiceſterſhire*, and *Cambridgeſhire*, but is not found any-where near *London*. It is biennial; the Plants, which riſe from Seeds one Year, ſpread out their Leaves very far on every Side, but do not riſe to flower till the next Summer, when they produce their Flowers and Seeds; ſoon after which they decay.

The lower Leaves, which ſpread on the Ground, are often Two Feet long; they are narrow, and have a leafy Border running along the Midrib; the Segments of the Leaves are alternate, and point upward, each being terminated by a long brown Spine; the Flower-ſtalk ariſes from the Center of the Plant, and grows to the Height of Four or Five Feet, ſending out upward ſeveral Side Branches: Theſe are garniſhed with Leaves of the ſame Form with the lower, but are ſmaller gradually to the Top. The principal Stalk, and alſo the Side Branches, are terminated by globular Heads of Flowers, which are compoſed of many Florets, included in one globular prickly Empalement, repreſented at *a*. This is curiouſly wrought over with a fine webbed hairy Down

be-

between the Spines, which makes a fine Appearance, and at the Top the Florets appear, which are of a beautiful purple Colour, as is ſhewn at *b*. Theſe Florets are all hermaphrodite, each having a long Tube, which ſits upon the Embryo, as is repreſented at *c* and *d*, and are cut at the Top into Five Segments. At *e* is repreſented the Seed taken out of the Empalement, crowned with its hairy Down at *f*; the Five Stamina and the Style are repreſented as they are connected at *g*, and *h* ſhews the Tube of the Flower cut open. The Style taken out of the Floret is repreſented at *i*, being in its full Length.

The Plant flowers the Beginning of *July*, and the Seeds ripen in the Autumn.

PLATE CCXCIV.

SOLANUM, *Tourn. Inſt. R. H.* 148. *Tab.* 62. *Raii Meth. Plant.* 74. *Lin Gen. Plant.* 224. Nightſhade; in French, *Morelle.*

TOurnefort ranges this Genus of Plants in the Seventh Section of his Second Claſs, which includes the *Herbs with a Wheel-ſhaped Flower of One Petal, whoſe Pointal becomes a ſoft Fruit.* Mr. *Ray* places it in the Third Section of his Seventeenth Claſs, which contains the *Herbs bearing Berries which grow ſparſedly.* Doctor *Linnæus* ranges it in the Firſt Section of his Fifth Claſs, which includes thoſe *Plants whoſe Flowers have Five Stamina and One Style.*

As this Plant ſhews the diſtinguiſhing Characters of the Genus very obviouſly, ſo we ſhall inſert them here.

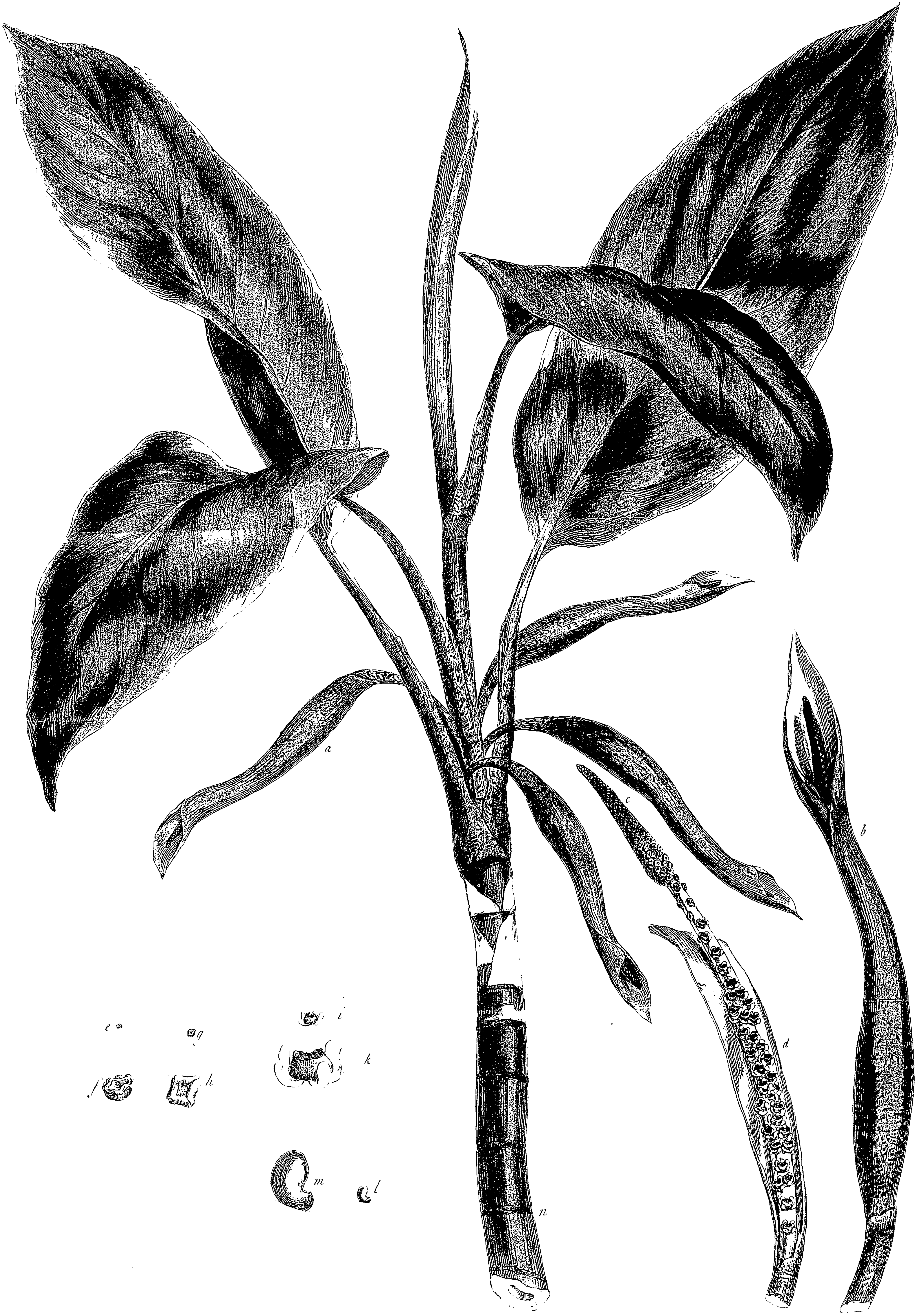
The Flower has a permanent Empalement of One Leaf, which is cut deeply into Five acute Segments, repreſented at d. *It has One Wheel-ſhaped Petal, ſhewn at* f, *with a very ſhort Tube. The Brim is large, five-pointed, a little folded, and plain, repreſented at* b. *It hath Five ſmall Awl-ſhaped Stamina, ſupporting ſo many oblong Summits, which naturally approach each other, repreſented at* h, *and a roundiſh Germen, ſupporting a ſlender Style, which is longer than the Stamina, crowned by an obtuſe Stigma, repreſented at* e. *The Germen afterward becomes a roundiſh ſmooth Fruit, ſhewn at* i, *having a convex fleſhy Receptaculum, as is repreſented at* m, *filled with roundiſh Seeds, ſhewn at* n.

This Plant has been very lately introduced into the *Engliſh* Gardens from *India*; and as it hath not been mentioned by any Botanic Writer, ſo we have exhibited its Figure in this Work by the following Title.

SOLANUM *caule inermi ſubfruticoſo, foliis oblongo-ovatis ſinuatis utrinque glabris, floribus alaribus.* Nightſhade with an unarmed almoſt ſhrubby Stalk, oblong oval ſinuated Leaves, which are ſmooth on both Sides, and Flowers coming from the Wings of the Stalk.

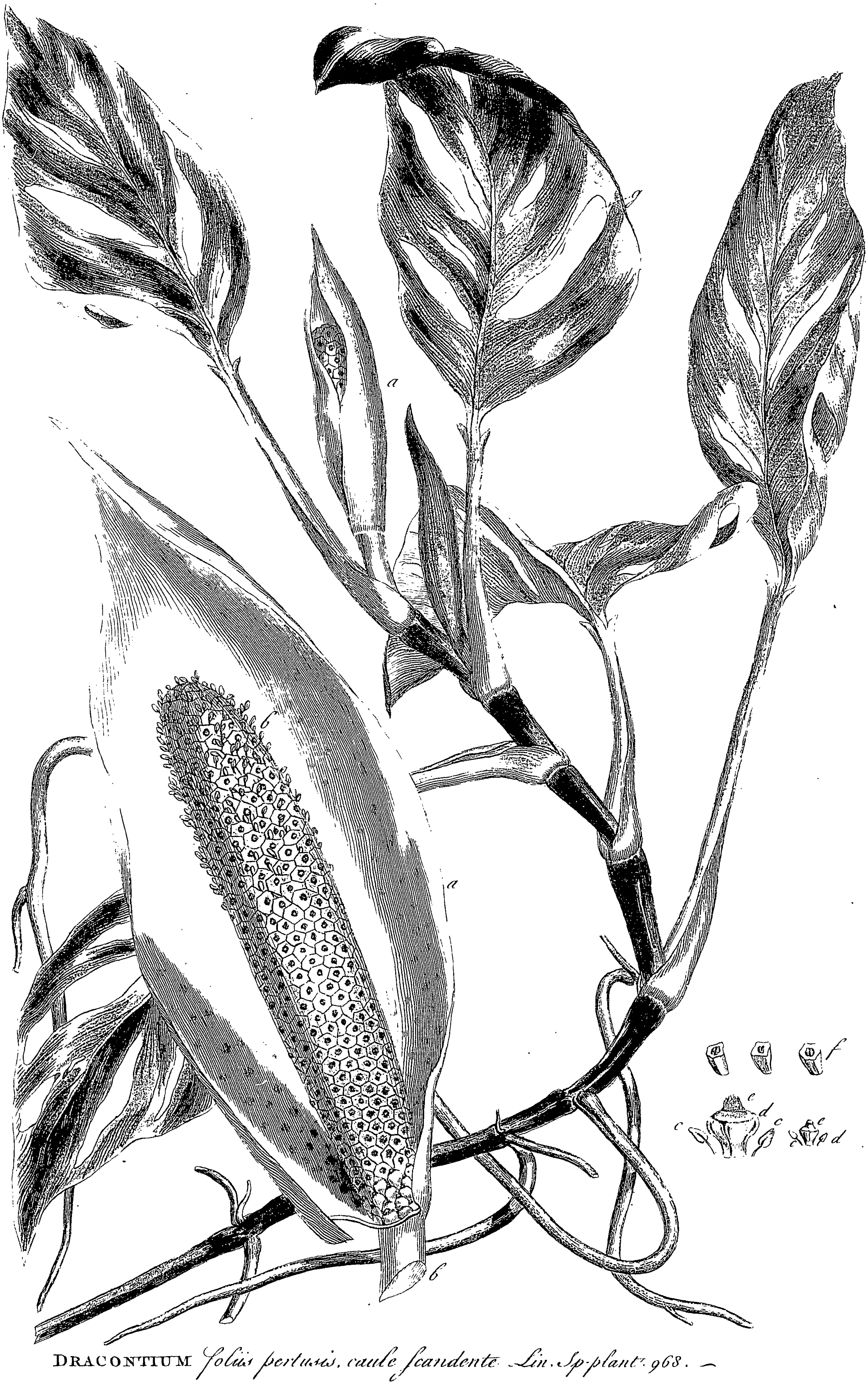
The Stalk of this Plant is taper and ſmooth, of a deep-green Colour when young, but afterwards the lower Part becomes ligneous, and has a brown Bark. It riſes from Two to Three Feet high, and ſends out Branches irregularly on every Side, which are garniſhed with oblong oval ſmooth Leaves, Four or Five Inches long, and Three broad in the Middle. They are irregularly ſinuated on their Edges, ending in obtuſe Points; of a deep-green Colour, and ſtand upon ſhort Footſtalks, placed without Order on the Branches. From the Wings of the Stalk come out the Footſtalks, which ſuſtain the Flowers; theſe are ſhort, and have frequently One or Two ſmall Leaves below the Flowers, which are generally cluſtered together at the Top, ſitting cloſe to the Footſtalks. The Flowers are large, of a fine blue Colour, having a very ſhort Tube, which ſpreads open almoſt flat above, having Five Corners or Angles, as is repreſented at *a*, where the back Part of the Flower is ſhewn cloſing inward; at *b* the Flower is ſhewn fully expanded, with the Five oblong Orange-coloured Summits ſitting in the Tube of the Petal. After the Flower fades, the Germen ſwells to roundiſh ſmooth Fruit, almoſt as large as a Walnut, with its outer Cover, of a deep-green Colour firſt, but, when ripe, changes to a pale yellow, filled with a ſoft Pulp, in which are lodged a great Number of oval Seeds.

It begins to ſhew its Flowers in *June*, and there is a Succeſſion of them on the Plants till Winter. The early Flowers will be ſucceeded by Fruit, which will ripen late in the Autumn, unleſs the Froſt deſtroys the Plants before; but if the Plants are removed into a moderate Stove, they may be preſerved through the Winter.



ARUM caulescens foliis ſagittatis Lin. ſp. plant. 967.

John Miller Pinx.t et Sculp



DRACONTIUM *foliis pertuſis, caule ſcandente* Lin. Sp. plant. 968.

J. Miller del. et Sculp.

Publish'd according to Act of Parliament by P. Miller June 30th 1760.

PLATE CCXCV.

Arum, *Tourn. Inſt.* *R. H.* 158. *Tab.* 69. *Raii Meth. Plant.* 74. *Lin. Gen. Plant.* 915. Wake-Robin, *or* Cuckow-Pint; *in* French, *Pied de Veau.*

The Characters of this Genus are,

THE Flower hath a large oblong Spatha (or Sheath), marked a, *which is cloſed at the Bottom, compreſſed in the Middle, and open at the Top, as is repreſented at* b : *The Spadix (or Stalk), which ſuſtains the Leaves and Flowers, is ſingle, marked* n ; *upon the Top of which are ſituated the Male Flowers, as is ſhewn at* c ; *and below theſe are the Germina, marked* d. *Theſe Flowers have no Petals, or Stamina. One of the Male Flowers is repreſented of the natural Size at* e, *which is magnified at* f : *At* g *is ſhewn an Embryo of its natural Bigneſs, and one which is magnified at* h. *The Embryo with its Cover is repreſented of its natural Size at* i, *and another magnified at* k ; *and at* l *is ſhewn the naked Embryo of its natural Size ; and at* m *is another magnified. Theſe Germina afterward become Berries, with One Cell, incloſing a ſingle Seed.*

This Genus of Plants is ranged by *Tournefort* in his Third Claſs of Plants, which includes the Herbs with an anomalous Flower of One Leaf, ſhaped like an Ear or Hood. Mr. *Ray* places it in his Seventeenth Claſs, which includes the Herbs bearing Berries. Dr. *Linnæus* ranges it in the Seventh Section of his Twentieth Claſs, which includes thoſe Plants whoſe Flowers have many Stamina, which ſit upon the Style or Pointal.

The Specie here repreſented is,

Arum *cauleſcens, foliis ſagittatis. Lin. Sp. Plant* [illegible]. Stalky Arum, with arrow-pointed Leaves. In the Gardener's Dictionary it is titled, *Arum cauleſcens, foliis ſagittatis, ſpathâ declinatâ clauſâ*; Stalky Arum, with arrow-pointed Leaves, and a declining cloſed Sheath. *Plumier* titles it *Arum arboreſcens, ſagittariæ foliis. Plant. Amer.* 44. Tree-like Arum, with arrow-pointed Leaves : And Sir *Hans Sloane*, in his Hiſtory of *Jamaica*, calls it *Arum caule geniculato, cannæ Indicæ foliis. Cat.* 63. Arum with a jointed Stalk, and Leaves like the *Indian* Cane. In the *Weſt-Indies* it is commonly called *Dumb Cane.*

This Plant riſes, with a jointed green Stalk, to the Height of Eight or Ten Feet, and is about the Size of a large Walking-ſtick : The Leaves come out toward the Top, in an irregular Order ; they are oblong, of a light-green Colour, and are from Seven to Ten or Eleven Inches long, and Five or Six broad in the Middle, having Two Ears at their Baſe, like the Beards of an Arrow. Their Footſtalks embrace each other at their Baſe, and between theſe come out the Spathæ, or Sheaths, as is repreſented at *a.* They are Five or Six Inches long, of the ſame Colour with the Leaves, ſwelling at a ſmall Diſtance from the Footſtalk, and compreſſed again in the Middle, opening a little at the Top, where the Point of the Spadix appears, upon which the Flowers are irregularly placed : Thoſe at the Top are formed into a cloſe Spike, but thoſe below are ranged ſparſedly. The Sheath is cloſely fixed on one Side to the Spadix, ſo cannot be ſeparated from it without being torn ; but on the oppoſite Side it may be opened, ſo as to ſhew the Spadix, with its Embryo, as is repreſented at *d* ; and it is only upon this Side of the Spadix that the Flowers are ranged, for the Sheath cloſely adheres to the other. The Embryo on the lower Part of the Spadix have each a thin Cover, compoſed of Five very ſmall white Leaves, which are faſtened to the under Part, and ſeparate above, as is ſhewn at *i* and *k.* The Embrya are green, kidney-ſhaped, and have brown Covers. The Male Flowers, at the Top of the Spadix, are of an irregular [illegible] Figure, and are brown. The Embrya do not come to Maturity in *England* ; the utmoſt Perfection they have yet arrived to is as that repreſented in its natural Bigneſs at *l*, and is magnified at *m.* The Time of its Flowering is in the Spring of the Year ; the whole Plant is filled with a ſharp acrimonious Juice, which will bliſter the tender Skin, if applied to it ; and, if a Part of the Leaf is broken and applied to the Tip of the Tongue, it occaſions a very painful Senſation, cauſing the Salivary Ducts to ſwell, and brings on a great Defluxion of Saliva : The Inhabitants of the Sugar Iſlands do ſometimes rub the Mouths of their Negroes with the Juice of this Plant, by way of Puniſhment ; and as this ſwells their Mouths, ſo as to prevent their eating or ſpeaking till the Swelling is aſſwaged, ſo it is called by them *Dumb Cane.*

PLATE CCXCVI.

Dracontium, *Lin. Gen. Plant.* 916. *Arum Plum. Amer.* 40. *Tab.* 56. *Dracunculus, Tourn. Inſt.* 160. *Tab.* 70. Dragon ; *in* French, *Serpentaire.*

The Characters of this Genus are,

IT hath a large boat-ſhaped Spatha, of a leathery Conſiſtence, with One Valve, repreſented at a, *and a ſingle cylindrical Spadix, on the upper Part of which the Parts of Fructification are diſpoſed in a ſingular manner, each being cloſely faſtened to the Spadix, as is ſhewn at* b, *having no Empalement, nor any Petals which can be properly ſo called. In this Specie there are but Two Stamina in each Flower, which have ſpatle-ſhaped Summits, repreſented at* c *and* d *of their natural Size, and at* c c *magnified. The Germen* e *is ſhaped like a Vaſe, having a coloured Crown, which is ſhewn magnified at* d e, *and at* f *there are Three of the Germina cut tranſverſely, wherein are ſeen the Embrya of Two Seeds.*

The Specie here repreſented is,

Dracontium *foliis pertuſis, caule ſcandente, Lin. Sp. Plant.* 968. Dragon with perforated Leaves and climbing Stalks. *Plumier* titles this Plant, *Arum hederaceum, amplis foliis perforatis. Plant. Amer.* 40. *Tab.* 56, 57. Climbing Cuckow-Pint, with large perforated Leaves.

This Plant grows naturally in many of the Iſlands in the *Weſt-Indies*, where the Stalks faſten themſelves to the

the Trees which are near them, by their Roots, which are put out at each Joint, and fix cloſely to the Bark of the Trees; ſo that, if the Stalks are cut off below, theſe Roots will draw Nouriſhment ſufficient for the Growth of the Plant, from the Trees to which they are faſtened; ſo, by this means, the Plants will riſe to the Top of the higheſt Trees. In *Europe*, where they muſt be kept in a warm Stove, if the Plants are placed near the Wall, the Roots which come out from the Stalks will faſten to the Wall, and thereby mount to the Top of the Stove; but thoſe Roots which come out on the oppoſite Side to to the Wall, will hang down ſeveral Feet; and if, in their Way downward, they meet with any Pot of Earth, they will faſten themſelves into it, or to any other Support near them. The lower Part of the Stalks are ſeldom larger than a Gooſe-quill; but that Part of the Stalk which immediately ſuſtains the Flower, is often as thick as a Man's Thumb. They are cylindrical, of a deep-green Colour, jointed, having a ſingle Leaf at each Joint, whoſe Footſtalks do almoſt embrace the Stalks with their Baſe. The Leaves are from Five to Seven or Eight Inches long, and from Three to Four or Five broad. On each Side of the Midrib are Two or Three Perforations of an oblong Form, which appear as if they were eaten by ſome Inſects, as is repreſented at *g*. The Spadix ariſes at the Top of the Stalk, and is embraced by the Baſe of the Footſtalks of the Leaf: This has a large boat-ſhaped Spatha (or Sheath), which opens on one Side the whole Length; and when the Parts of Fructification arrive near to Maturity, the Spatha (or Sheath) ſeparates from the Spadix, leaving it uncovered in the manner as is here repreſented, having Marks of the Parts of Fructification on the Inſide, which appear like ſo many Spots. The Time of this Plant's Flowering is not conſtant; ſometimes they appear in the Spring, and at others in the Autumn; but they are of long Duration, frequently continuing Five or Six Months: But the Fruit does not come to Maturity in *England*.

As there has not been any good Figures of theſe Two Plants, wherein the Parts of the Fructification have been well repreſented; and theſe having, for ſome Years paſt, produced their Flowers in the *Chelſea* Garden, ſo I have taken the Liberty to exhibit the Plants in the beſt State to which they have arrived here.

PLATE CCXCVII.

FIG. 1. GLADIOLUS. *Tourn. Ray. Lin. &c.* Cornflag; *in* French, *Gaicul.*

AS the Characters of this Genus of Plants has been already exhibited in the Courſe of this Work, it is unneceſſary to repeat them here.

The Specie here repreſented is,

GLADIOLUS, *foliis enſiformibus, floribus alternis, corollis patentibus.* Cornflag, with ſword-ſhaped Leaves, Flowers ranged alternately, and ſpreading Petals.

This Plant grows naturally at the *Cape of Good Hope*, from whence the Seeds were ſent to *Holland*, where the Plants were raiſed by Mr. *Willem Vanhazen*, near *Leyden*, who was ſo kind as to ſend me a Root of it.

The Root is tuberous and compreſſed, having a greyiſh Skin or Cover, from which ariſe Four or Five narrow ſword-ſhaped Leaves, Nine or Ten Inches long, and about One Inch broad in the Middle, where they are broadeſt, as is ſhewn at *a*; of a deep Green, ending in acute Points. Between the Leaves come out the Flower Stem, which is cylindrical, and riſes a Foot and a Half high, repreſented at *b*, garniſhed with Two or Three ſmaller Leaves, according to the Number of Joints in the Stem, which is almoſt embraced by their Baſe. The Flowers are ranged alternately toward the Top of the Stalk, each being incloſed in a Spatha (or Sheath) of One Leaf, which opens on one Side, as is repreſented at *c*: The Flower is of One Leaf, which is deeply divided into Six unequal Parts, as is repreſented at the Bottom, and has Three awl-ſhaped Stamina, which are inſerted at their Baſe, alternately, into every other Segment of the Petal, repreſented at *e*. The Germen, which is ſhewn at *g*, is ſituated under the Flower, ſupporting a ſlender Style, which is longer than the Stamina, crowned by a trifid Stigma, repreſented at *f*. The Flower is of a pale Fleſh Colour, and appears in *May*. After the Flower is paſt, the Germen ſwells to an oblong blunt Capſule, having Three Cells, which are filled with irregular-ſhaped Seeds. Soon after the Seeds are ripe, the Stalk and Leaves decay, and the Roots remain inactive till Winter, when they put out new Fibres, and the Leaves puſh out early the following Spring.

Fig. 2. WATSONIA.

The Characters of this Genus of Plants have been exhibited already in the Courſe of this Work, ſo need not to have been repeated here, were it not for the Alteration of the Title to this Genus. Dr. *Trew*, of *Nuremburg*, who had a Drawing of the Firſt Sort before repreſented in this Work, ſent him, which was taken from a Plant in Flower in the *Chelſea* Garden, publiſhed it among his rare Plants, under the Title of *Meriana*, before he had ſeen my Book, in which I had given it the Title of *Watſonia*, in Honour of Dr. *Watſon*, F. R. S. who is a very learned Botaniſt: But upon ſeeing my Title, he wrote to me, that he would ſuppreſs his in his Tables, and continue mine to the Plant, as I had raiſed it from Seeds, and had it firſt in Flower in the *Chelſea* Garden: But ſince this, Dr. *Linnæus*, in his laſt Edition of the *Syſtema Naturæ*, has ranged it under the Genus of *Antholyza*, to which he has alſo added the *Cunonia* of *Butner*. But as both theſe Plants do eſſentially differ in their Characters from that which he has choſen to conſtitute his Genus, the Flowers of which have but One Stamen, and both theſe have Three; ſo there is Reaſon for keeping them ſeparate: And as the Flowers of *Cunonia* are divided almoſt to the Bottom, and are ſhaped like a Butterfly, ſo that ſhould not be joined with this Plant, whoſe Flowers have long Tubes, the Brims of which are cut into Six equal Parts, ſpreading open. This Shape of the Flower alſo removes it from the *Gladiolus*, to which it is nearer allied than to the *Antholyza*; therefore I ſhall continue my former Title to the Genus, and believe thoſe who will examine the Characters with Impartiality, will agree with me ſo to do.

The Specie here repreſented is,

WATSONIA *humilis, foliis lineari-enſiformibus, tubo floris longiſſimo.* Dwarf Watſonia, with linear ſword-ſhaped Leaves, and a very long Tube to the Flower.

This Plant is a Native of the *Cape of Good Hope*, from whence the Seeds were brought by Captain *Hutchinſon*, of the *Godolphin Indiaman*, in the Year 1754. The Root is tuberous, compreſſed, and covered with a browniſh Skin; from which come out Four or Five narrow ſword-ſhaped Leaves, about Five or Six Inches long, and One-third of an Inch broad in the Middle, ending in acute Points, of a dark Green, embracing each other with their Baſe, ſee Letter *a*. From between theſe comes out the Flower Stem *b*, which is naked, and riſes a Foot high: Toward the Top the Flowers are ranged alternately, each having a Spatha (or Sheath), which is divided into Two Parts, as is repreſented at *c*. The Tube of the Flower is long, narrowed at the Baſe, but is greatly enlarged above, as is ſhewn at *d*. The Brim is cut into Six equal Segments, as is repreſented at *e*, which ſpread open. Under the Flower is ſituated the Germen, ſupporting a ſlender Style, crowned by a trifid Stigma, each Diviſion being bifid and reflexed, as is ſhewn at *g*. This Style is attended by Three ſlender Stamina, of the ſame Length, repreſented *f f*, terminated by moving Summits. The Flower is of a bright Red on the Outſide, but is paler on the Inſide. Theſe appear the latter End of *May*, and continue in Beauty a Fortnight or Three Weeks; then the Leaves and Stalk decay, without producing Seeds here.

P L A T E CCXCVIII.

TRIUMFETTA, *Plum. Gen.* 40. *Tab.* 8. *Lin. Gen. Plant.* 529. *Bartramia Lin. Gen. Plant.* 480. We have no *Engliſh* Title for this Plant.

The Characters of the Genus are,

THE Empalement of the Flower is cut into Five linear Segments a, *which ſoon fall off*; *it has, for the moſt Part, Five narrow Petals* b, *which are erect, and Ten ſlender Stamina* c, *which are terminated by roundiſh Summits* d: *In the Center of the Flower is ſituated a roundiſh Germen, ſupporting a hairy Style* e, *the Length of the Stamina, crowned by a ſingle Stigma: The Germen afterward becomes a roundiſh prickly Fruit, whoſe Spines are crooked* f, *having Four or Five Cells* g, *each containing One Seed* h.

The Specie here repreſented is,

TRIUMFETTA, *foliis oblongo-ovatis, obtuſe ſerratis, petiolis longiſſimis.* Triumfetta, with oval oblong Leaves, bluntly ſawed, ſtanding upon very long Footſtalks.

This Plant grows naturally in *India*, from whence the Seeds were brought, which have ſucceeded in the *Chelſea* Garden, where the Plants have flowered and perfected their Seeds. It is annual, and periſhes ſoon after the Seeds are ripe, ſo is very different from that Specie which Doctor *Linnæus* titled *Bartramia*, in the former Edition of his Genera; but in the laſt Edition of his Syſtem he has joined it again to *Triumfetta*, from which it only differs in having ſometimes Ten Stamina, whereas the *Triumfetta* of *Plumier* has rarely more than Eight. When the Flowers of this Plant has but Four Petals (or Segments), then there are but Eight Stamina in the Flower; but when the Flower has Five Petals, then there are always Ten Stamina in each.

The Plant riſes about Two Foot and a Half high, ſending out ſeveral Branches on every Side, which are garniſhed with oval Leaves, ending in long acute Points, ſome of which are heart-ſhaped, and others have an Angle on each Side towards the Point. They are from Three to Four Inches long, and almoſt as much in Breadth in their broadeſt Part, ſtanding upon very long Footſtalks, and are crenated on their Edges.

The Flowers come out in long looſe Spikes at the Top of the Plant, being ranged without Order. They are ſmall and yellow, ſome having Four Petals, and Eight Stamina, and others have Five Petals and Ten Stamina. After the Flower is paſt, the Germen turns to a roundiſh burry Fruit, with Four Cells, each containing One Seed. It flowers in *September*, and the Seeds ripen in *November*.

P L A T E CCXCIX.

SIDEROXYLUM. *Dillen. Hort. Elth.* 263. *Lin. Gen. Plant.* 234. Iron-wood.

The Characters of the Genus are,

IT hath Male and Hermaphrodite Flowers on different Plants. The Male Flowers have an Empalement, which is cut into Five obtuſe Segments a: *The Flower is divided into Five roundiſh concave Parts* b, *almoſt to the Bottom: It has Five incurved Stamina* d, *which are terminated by oval Summits* e. *In the Center is placed a roundiſh compreſſed pointed Body, reſembling a Germen,* f, *which has neither Style or Stigma, and falls away with the Flower, without having any Appearance of Fruit.*

This Genus is placed in the Firſt Section of *Linnæus*'s Fifth Claſs, which includes the Plants whoſe Flowers have Five Stamina and One Style: But as the Male Flowers grow on ſeparate Plants from the Fruit, ſo it ſhould be referred to the Twenty-third Claſs. But as *Doctor Linnæus* has not ſeen the Flowers of theſe Plants, ſo he may be excuſed for ranging them here.

The thorny Sort, which is common in the *Weſt Indies*, alſo agrees with this, having Plants which bear only Male Flowers, Two of which have produced Flowers in the *Chelſea* Garden; and Dr. *Houſtoun* ſent Specimens of the Male and Hermaphrodite Trees from *Jamaica* to the Author.

The Sort here repreſented is,

SIDEROXYLUM *mas inerme*. Male Iron-wood without Thorns.

This Tree grows naturally at the *Cape of Good Hope*, where it riſes to the Height of our Apple-trees in *England*. The Wood of it is ſo heavy as to ſink in Water. But in *Europe* the Trees do rarely arrive to more than Eight or Ten Feet high, dividing into many Branches, which are covered with a Ruſſet Bark, and are garniſhed with ſpear-ſhaped Leaves, about Three Inches long, and an Inch and a Half broad in the Middle, ending in Points at both Extremities. They are placed without Order on the Branches, having Footſtalks an Inch long. The Leaves are ſmooth, and of a lucid Green, continuing all the Year. The Flowers come out in Cluſters from the Side of the Branches, ſtanding upon ſhort Footſtalks, which branch out into ſeveral ſmaller, each ſuſtaining a ſingle Flower, which is ſmall and white, one of which is repreſented of its natural Size at *g*, the other is magnified. This Plant flowers in *May* and *June*.

PLATE CCC.

LYCIUM, *Lin. Gen. Plant.* 232. *Jaſminoides Niſſol. Ac. Reg. Par.* 1711. *Rhamnus C. B. P.* 477. Boxthorn.

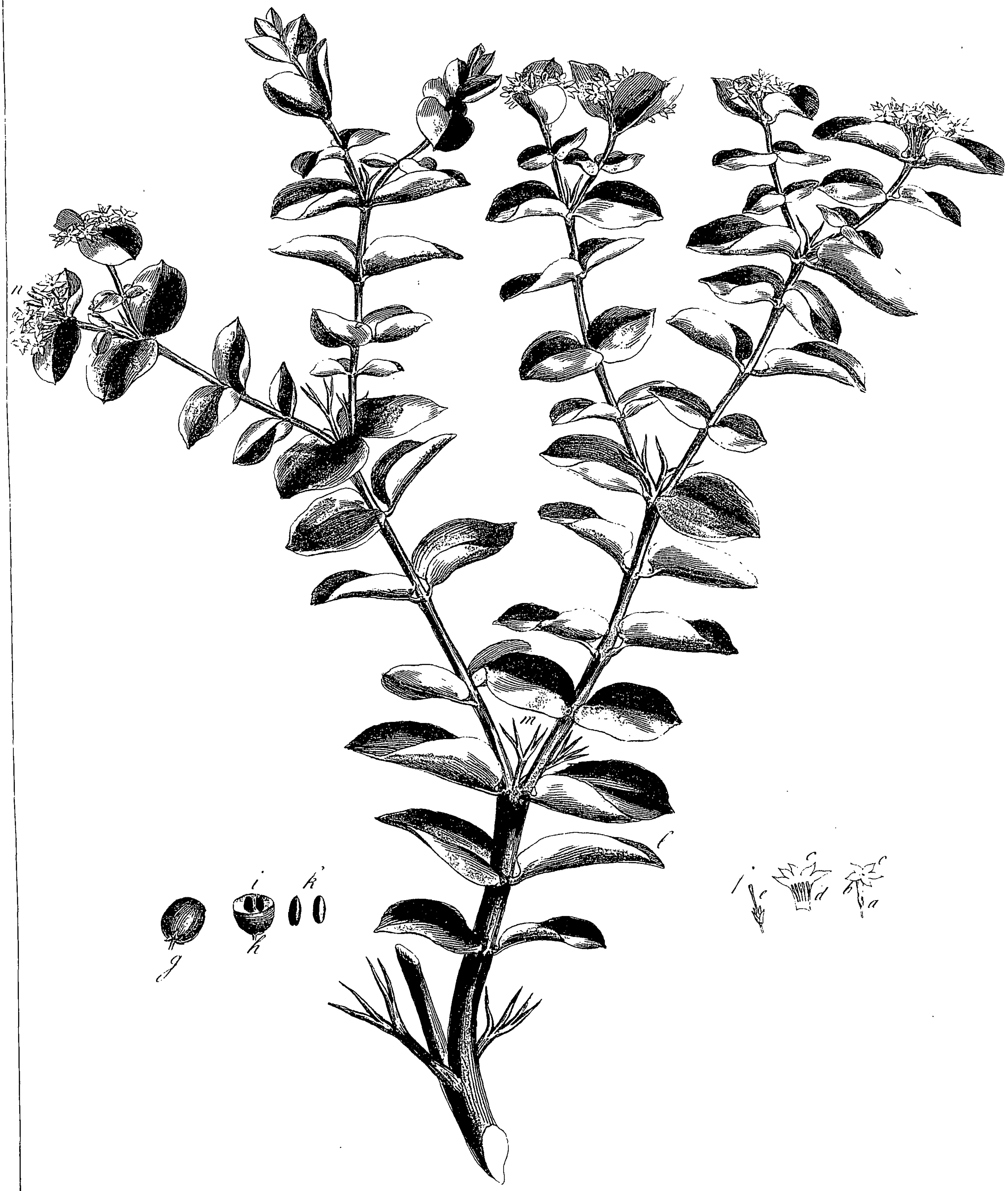
THIS Genus of Plants is ranged in the Firſt Section of *Linnæus* Fifth Claſs, which includes thoſe Plants whoſe Flowers have Five Stamina and One Style. As the Characters of this Genus have been already exhibited in the Courſe of this Work, ſo it is needleſs to repeat them here.

The Specie here repreſented is,

LYCIUM, *foliis cordato-ovatis, oppoſitis ſeſſilibus perennantibus ſpinis craſſis bigeminis, floribus confertis. Dict. Hort.* Boxthorn, with oval heart-ſhaped ever-green Leaves, placed oppoſite, ſitting cloſe to the Branches, thick Spines in Pairs, and Flowers in Cluſters.

The Seeds of this Plant were brought from the *Cape of Good Hope* to the *Dutch* Gardens, where the Plants were firſt raiſed, and have ſince been communicated to the curious Botanic Gardens in moſt Parts of *Europe*. Some of the *Dutch* Botaniſts have ranged this Plant under the Genus of *Randia*, from the Shape of the Flower, to which it has a near Affinity, if the Fruit is not admitted as a Character; but, if this be allowed, it muſt be ranged with the *Lycia*, for the Fruit of the *Randia* has but One Cell, which is filled with cartilaginous compreſſed Seeds; whereas the Fruit of this has Two Cells, each containing a ſingle Seed. It is a low Shrub, which ſeldom riſes above Four or Five Feet high, ſending out Branches from the Root upward, which divide in Pairs and ſpread aſunder. Theſe are covered with a green Bark, as is ſhewn in the Figure, and are garniſhed with oval heart-ſhaped ſtiff Leaves, about an Inch long, and Three Quarters of an Inch broad at their Baſe, ending in acute Points, ſitting cloſe to the Branches, and are placed oppoſite; they continue green all the Year. At the Diviſions of the Branches ſtand the Spines, which are forked and double: They are ſhort and ſtiff, for the moſt Part growing erect. At the End of the Branches the Flowers are produced in Cluſters, as is repreſented at *n*. The Cup of the Flower, ſhewn at *a*, is ſmall, erect, and ſlightly indented at the Top in Five Parts; this is permanent. The Flower is funnel-ſhaped; the Tube *b* is cylindrical, and a little incurved at the Top, where it is cut into Five acute Segments, which ſpread open, repreſented at *c*. In the Tube of the Flower there are Five awl-ſhaped Stamina, terminated by erect Summits, as at *d*. The Germen is ſituated in the Flower Cup, ſupporting a ſingle Style, which is longer than the Stamina, ſhewn at *e*, and crowned by a thick bifid Stigma, marked *f*. After the Flower is paſt, the Germen ſwells to an oval fleſhy Berry, repreſented at *g*, which has Two Cells, as is ſhewn at *h*, where the Berry is cut tranſverſely at *i*, in each of which is lodged a ſingle oblong hard Seed, repreſented at *k*.

This Shrub produces its Flowers in *July* and *Auguſt*, which are of a clear White; and the Fruit ripens the Spring following, which is of a deep-red Colour when ripe.



LYCIUM *foliis cordatō-ovatis oppositis ſeſsilibus perennantibus, spinis craſsis bigeminis floribus confertis* Dict. Hort.

J. Miller del. & Sc.

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